DOCUMENT RESUME

ED 216 297 CG 015 981

AUTHOR Hing, Esther; Cypress, Beulah K.
TITLE Use of Health Services by Women 65 Years of Age and Over; United States. Vital & Health Statistics. Data from the National Health Survey Series 13, No. 59.
INSTITUTION National Center for Health Statistics (DHHS/PHS), Hyattsville, MD.
REPORT NO DHHS-PHS-81-1720
PUB DATE Aug 81
NOTE 81p.; Material made available at the White House Conference on Aging (3rd, Washington, DC, November 30-December 3, 1981). For related documents, see CG 015 980-987 and ED 215 257-289.
AVAILABLE FROM Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Females; Geriatrics; Health Needs; *Health Services; Hospitals; *Individual Characteristics; *Medical Care Evaluation; *Medical Services; Nursing Homes; *Older Adults; Racial Differences; Sex Differences
IDENTIFIERS *White House Conference on Aging

ABSTRACT

As the American population increases, the health problems of older women will be of greater concern to health planners, because it is the elderly woman who most often survives to old age and has greater need of services. Data from the National Health Survey was used to determine characteristics, conditions, management, and outcomes of patients at physicians' offices, hospitals, and nursing homes. Results showed that ambulatory care in physicians' offices was most often sought by older women, generally for chronic, non-life-threatening conditions; their use of short stays at hospitals was only for acute illnesses. Minority women used medical services less often than white women but had longer lengths of hospital stays. This document contains numerous figures, tables, and appendices illustrating the statistical data and survey results. (JAC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

VITAL AND HEALTH STATISTICS

ED216297

CG 015981

Use of Health Services by Women 65 Years of Age and Over United States

Statistics are presented on the utilization of nonfederally employed office-based physicians, non-Federal short-stay hospitals, and nursing homes by women 65 years of age and over. Estimates are based on data collected in the National Ambulatory Medical Care Survey, the National Hospital Discharge Survey, and the National Nursing Home Survey. Patterns of use are described by demographic characteristics of the patients, patient condition, patient management, and outcome.

Data From the National Health Survey
Series 13, No. 59

Esther Hing
Beulah K. Cypress

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

DHHS Publication No. (PHS) 81-1720

U.S. Department of Health and Human Services
Public Health Service
Office of Health Research, Statistics, and Technology
National Center for Health Statistics
Hyattsville, Md.
August 1981

Library of Congress Cataloging in Publication Data

Hing, Esther.

Use of health services by women 65 years and over.

(Vital and health statistics. Series 13, Data from the national health survey ; no. 59) (DHHS publication ; no. (PHS) 81-1720)

Authors: Esther Hing and Beulah K. Cypress.

"August 1981."

Bibliography: p.

Supt. of Docs. no.: HE 20.6209: 13/59

1. Aged women—Medical care—United States—Statistics. 2. Medical care—United States—Utilization—Statsitics. 3. Health surveys—United States. 4. United States—Statistics, Medical. I. Cypress, Beulah K. II. National Center for Health Statistics (U.S.) III. Title. IV. Series. V. Series: DHHS publication ; no. (PHS) 81-1720. [DNLM: 1. Health services for the aged—Utilization—United States. 2. Women. W2 A N148vm no. 59]

RA407.3.A349 no. 59 362.1'1'0973s 81-607865

[RA408.W65] [362.1'9'0880565 AACR2

ISBN 0-8406-0228-6

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

National Center for Health Statistics

DOROTHY P. RICE, *Director*

ROBERT A. ISRAEL, *Deputy Director*

JACOB J. FELDMAN, Ph.D., *Associate Director for Analysis and Epidemiology*

GAIL F. FISHER, Ph.D., *Associate Director for the Cooperative Health Statistics System*

GARRIE J. LOSEE, *Associate Director for Data Processing and Services*

ALVAN O. ZARATE, Ph.D., *Assistant Director for International Statistics*

E. EARL BRYANT, *Associate Director for Interview and Examination Statistics*

ROBERT C. HUBER, *Associate Director for Management*

MONROE G. SIRKEN, Ph.D., *Associate Director for Research and Methodology*

PETER L. HURLEY, *Associate Director for Vital and Health Care Statistics*

ALICE HAYWOOD, *Information Officer*

Division of Health Care Statistics

W. EDWARD BACON, Ph.D., *Director*
JOAN VAN NOSTRAND, *Deputy Director*
JAMES E. DELOZIER, *Chief, Ambulatory Care Statistics Branch*
MARY MOIEN, *Chief, Hospital Care Statistics Branch*
EVELYN S. MATHIS, *Chief, Long-Term Care Statistics Branch*
MANOOCHEHR K. NOZARY, *Chief, Technical Service Branch*

COOPERATION OF THE U.S. BUREAU OF THE CENSUS

Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the National Center for Health Statistics, the Bureau of the Census, under a contractual arrangement, participated in planning the National Hospital Discharge Survey and collecting its data.

Library of Congress Catalog Card Number 81-607865

Contents

Introduction 1
Overview 1
Population characteristics 1
Health status 1

Sources and limitations of data 6

Ambulatory care in physicians' offices 8
Patient characteristics 8
Patient condition 9
Patient management 13
Outcome 15

Hospital care 16
Patient characteristics 16
Patient condition 16
Patient management 19
Outcome 20

Nursing home care 24
Patient characteristics 24
Patient condition 25
Patient management 27
Outcome 29

Discussion 35

References 36

List of detailed tables 38

Technical appendixes 55
I. Definitions of terms used in the National Ambulatory Medical Care Survey 56
II. Definitions of terms used in the National Hospital Discharge Survey 59
III. Definitions of terms used in the National Nursing Home Survey 61
IV. Questionnaires used in the National Ambulatory Medical Care Survey, the National Hospital Discharge Survey, and the National Nursing Home Survey 63

List of Text Figures

1. Percent of married and nonmarried units with earnings income: United States, 1976 2
2. Percent of persons with incomes below poverty level, by marital status, sex, and age: United States, 1976 3
3. Percent of women 65 years of age and over below the poverty line, by family status and race or Hispanic origin: United States, 1977 3
4. Incidence of malignant neoplasm in 10 regions, by age and sex: United States, 1973-77 4

5. Incidence of acute conditions per 100 persons per year, by age and sex: United States, July 1977-June 1978 5
6. Number of acute injuries per 100 persons per year, by age and sex: United States, July 1977-June 1978 5
7. Annual rate of office visits made by women for essential benign hypertension, heart disease, diabetes mellitus, and arthritis and rheumatism, by age of patient: United States, 1978 12
8. Annual rate of office visits made by women for neuroses, by age of patient: United States, 1978 12
9. Annual rate of office visits made by women for malignant neoplasm of breast and rate of hospital discharges for breast surgery, by age of patient: United States, 1978 12
10. Percent of office visits made by women, by seriousness of condition and age of patient: United States, 1978 13
11. Annual rate of office visits made by women for general medical examination, blood pressure test, and Pap smear, by age of patient: United States, 1978 14
12. Death rate for malignant neoplasm of cervix uteri, by age of patient: United States, 1976 14
13. Incidence of malignant neoplasm of the cervix uteri among women in 10 regions, by age of patient: United States, 1973-77 15
14. Number, percent distribution, and rate of patients discharged from short-stay hospitals, by sex and age of patient: United States, 1978 17
15. Number of women 65 years of age and over discharged from short-stay hospitals per 1,000 population, by race: United States, 1978 18
16. Average length of stay of women 65 years of age and over discharged from short-stay hospitals, by age: United States, 1978 21
17. Average length of stay of women 65 years of age and over discharged from short-stay hospitals, by race: United States, 1978 22
18. Hospital fatality rate for women 65 years of age and over discharged from short-stay hospitals, by race: United States, 1978 22
19. Number of nursing home residents per 1,000 population 65 years of age and over, by sex and age: United States, 1977 .. 25
20. Number of nursing home residents per 1,000 population 65 years of age and over, by race and sex: United States, 1977 26
21. Percent of women discharged from nursing homes, by selected chronic conditions and impairments, by age: United States, 1976 28
22. Percent of women 65 years of age and over discharged from nursing homes who were chairfast or bedfast, or incontinent, by age: United States, 1978 28
23. Percent of women 65 years of age and over discharged from nursing homes who used eyeglasses, wheelchair, or walker, by age: United States, 1976 29
24. Percent distribution of women 65 years of age and over discharged from nursing homes who received intensive nursing care, by mobility and continence status: United States, 1976 30
25. Percent of women 65 years of age and over discharged from nursing homes who were incontinent and bedfast or chairfast by length of stay: United States, 1976 31
26. Percent of women 65 years of age and over discharged from nursing homes with chronic conditions of senility and chronic brain syndrome, by length of stay: United States, 1976 31
27. Percent of women 65 years of age and over discharged from nursing homes, by type of therapy received, by length of stay: United States, 1976 32
28. Percent of women 65 years of age and over discharged from nursing homes who received intensive nursing care, by length of stay: United States, 1976 33
29. Average length of stay for women 65 years of age and over discharged from nursing homes, by marital status: United States, 1976 33

List of Text Tables

A. Number, percent distribution, and annual rate of office visits made by females, by race and age of patient: United States, 1978 8
B. Number and percent distribution of office visits made by females by age of patient, according to Hispanic or Non-Hispanic origin: United States, 1979 8
C. Number and percent distribution of office visits made by women by physician specialty, according to age of patient: United States, 1978 9
D. Annual rate of office visits made by women 65 years of age and over by race of patient and selected principal diagnoses: United States, 1978 9
E. Prevalence rate with percent of difference and visit rate with percent of difference among women, by age, race, and selected chronic conditions: United States, 1978 10
F. Prevalence rate with percent of difference and visit rate with percent of difference among patients 65 years of age and over, by sex of patient and selected chronic conditions: United States, 1978 10

G. Number and percent of office visits made by women 65 years of age and over, by selected principal diagnoses and most frequent second- or third-listed diagnosis: United States, 1978 11
H. Rate of return office visits made by women, by age of patient and selected principal diagnoses: United States, 1978 11
J. Number and percent distribution of office visits made by women 65 years of age and over, by disposition of visit: United States, 1978 15
K. Percent distribution of women 65 years of age and over discharged from short-stay hospitals or noninstitutionalized, by marital status: United States, 1978 18
L. Number and percent of office visits made by women 65 years of age and over and number and percent discharged from short-stay hospitals, by selected first-listed diagnoses: United States, 1978 18
M. Number and percent distribution of women discharged from short-stay hospitals by number of diagnoses for each patient, according to age of patient: United States, 1978 19
N. Number and rate of women discharged from short-stay hospitals, by surgery status and age of patient: United States, 1978 20
O. Rate of all-listed operations for women discharged from short-stay hospitals, by age of patient and selected surgical categories: United States, 1978 20
P. Average length of stay of women discharged from short-stay hospitals, by age of patient and selected first-listed diagnoses: United States, 1978 21
Q. Average length of stay of women 65 years of age and over discharged from short-stay hospitals, by surgery status and age of patient: United States, 1978 22
R. Average length of stay of women 65 years of age and over discharged from short-stay hospitals, by marital status: United States, 1978 22
S. Fatality rate of patients discharged from short-stay hospitals, by sex and age of patient: United States, 1978 22
T. Number and percent distribution of patients 65 years of age and over discharged from short-stay hospitals, by sex of patient and discharge status: United States, 1978 23
U. Percent distribution of women 65 years of age and over discharged from nursing homes, by age and marital status: United States, 1976 26
W. Percent of women 65 years of age and over discharged from short-stay hospitals and from nursing homes, by selected diagnoses: United States, 1978 and 1976 26
Y. Percent distribution of women 65 years of age and over discharged from nursing homes, by selected functional statuses: United States, 1976 27
Z. Average length of stay of patients 65 years of age and over discharged from nursing homes, by sex, age, and marital status: United States, 1976 30
AA. Average age by discharge status and average length of stay of women 65 years of age and over discharged from nursing homes, by discharge status and age of patient: United States, 1976 33
BB. Number, percent distribution, and average length of stay of women 65 years of age and over discharged from nursing homes, by living arrangement after discharge: United States, 1976 34

Symbols

- - -	Data not available
. . .	Category not applicable
-	Quantity zero
0.0	Quantity more than zero but less than 0.05
Z	Quantity more than zero but less than 500
*	Figure does not meet standards of reliability or precision
#	Figure suppressed to comply with confidentiality requirements

Use of Health Services by Women 65 Years of Age and Over

by Esther Hing and Beulah K. Cypress, Ph.D., Division of Health Care Statistics

Introduction

Overview

As the American population ages, the health problems of elderly women will play a greater role in the concerns of health planners because it is the elderly woman who more often survives to old age and thus is subject to greater risk of disease and need for services. In 1978, 130 women were aged 65-74, 166 aged 75-84, and 220 aged 85 years and over for every 100 men of the same age.[1] The 7-year difference in life expectancy by sex, which accounted for the greater number of females in 1978, is expected to increase to a 10-year difference by the year 2003.[2] Thus the problems of old age will be largely the problems faced by older women. This report will examine the use of three major health care settings by the elderly woman: physicians' offices, hospitals, and nursing homes. Data are from three sample surveys conducted by the National Center for Health Statistics: the National Ambulatory Medical Care Survey, the National Hospital Discharge Survey, and the National Nursing Home Survey. The data will show the health problems presented by elderly women in each of these settings and relate these problems to treatment or care received. Selected data on the outcome of care in relation to mortality and length of stay in hospitals and nursing homes will also be examined.

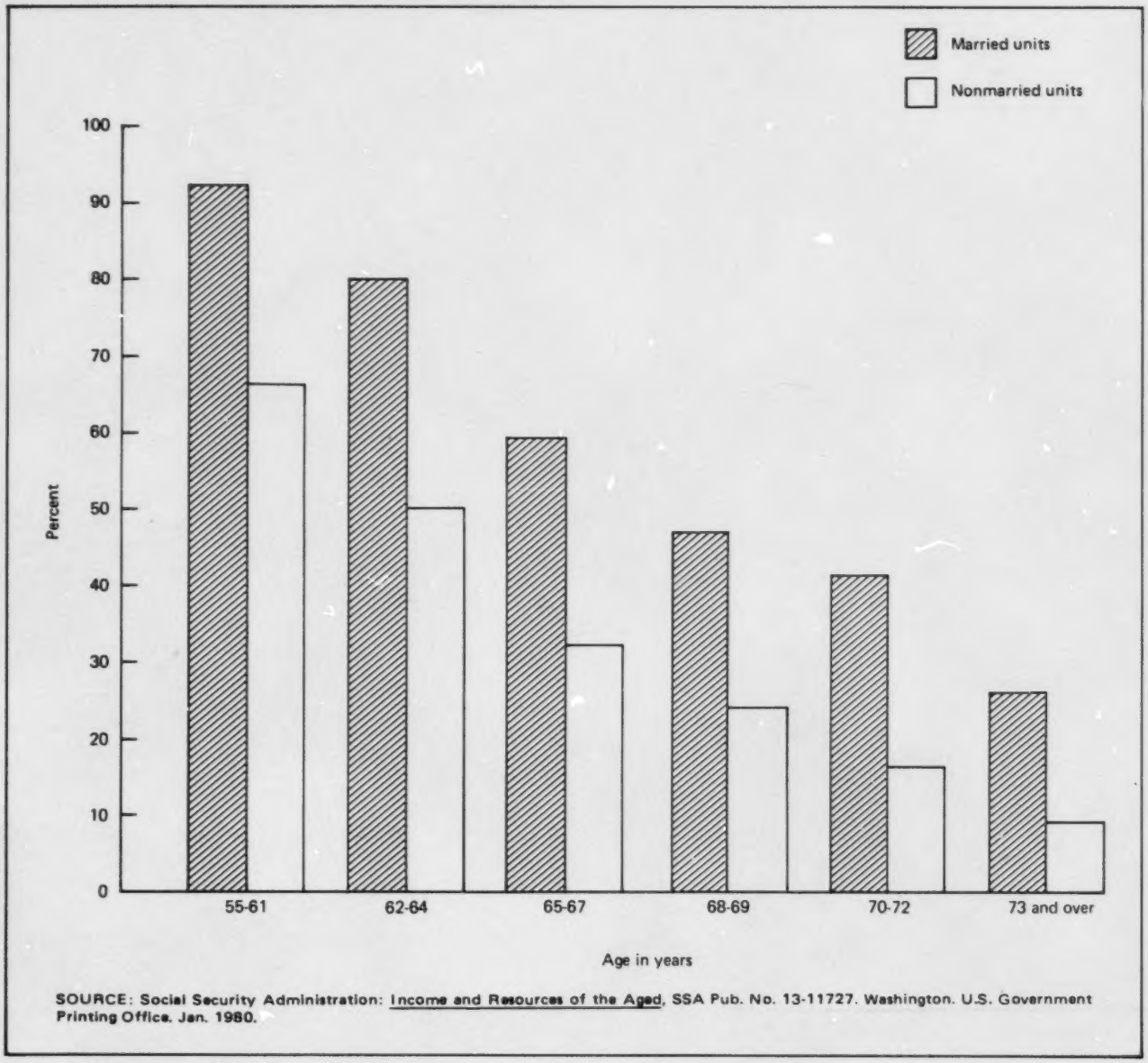
Population characteristics

In 1978 an estimated 14.3 million women were 65 years of age and over in the United States. Of these women, 91 percent were white, 8 percent were black, and about 1 percent were members of other races.[1] About 285,000 or 2 percent of the civilian noninstitutionalized female population 65 years of age and over were of Hispanic origin.[1] Most of the civilian noninstitutionalized female population 65 years of age and over lived in families (57 percent), but only 36 percent were wives.[1] The most common marital status for these women was widow. In 1978, 52 percent of the women 65 years of age and over and 69 percent of those 75 years of age and over were widowed.[1] (The proportion is even higher among elderly women in institutions.) Nearly half of the women aged 75 years and over lived alone.[1] The loss of a spouse creates hardship for the older woman not only in terms of loneliness and isolation, but also in terms of reduced financial resources. In 1977, the median income for an elderly widow was $3,502 compared with $6,059 for an elderly married couple.[1] Generally, married couples had higher earnings than nonmarried persons (figure 1), but even among the nonmarrieds, the incomes of women were lower than the incomes of their male counterparts. Thus more "poor" women were found than "poor" men (figure 2).

Among all women 65 years of age and over, black and Hispanic women were more likely to have incomes below the poverty level (41 and 20 percent, respectively) than white women were (15 percent) (figure 3). The poverty of black and Hispanic women is accentuated if they do not live with families. However, even among women living with families, a larger proportion of black women had incomes below the poverty level (29 percent) than white women did (6 percent). This proportion is greater because black women are more likely than white women are to maintain a family without a husband (21 percent compared with 8 percent, respectively).[1] Elderly black women were nearly 3 times as likely as white women were to be the recipients of public assistance.[3] Thus because older women have fewer social and financial resources to draw on, they are at a disadvantage when they have a major health problem. Elderly black and Hispanic women are particularly vulnerable.

Health status

What are the health problems facing older women? The major health characteristic of older



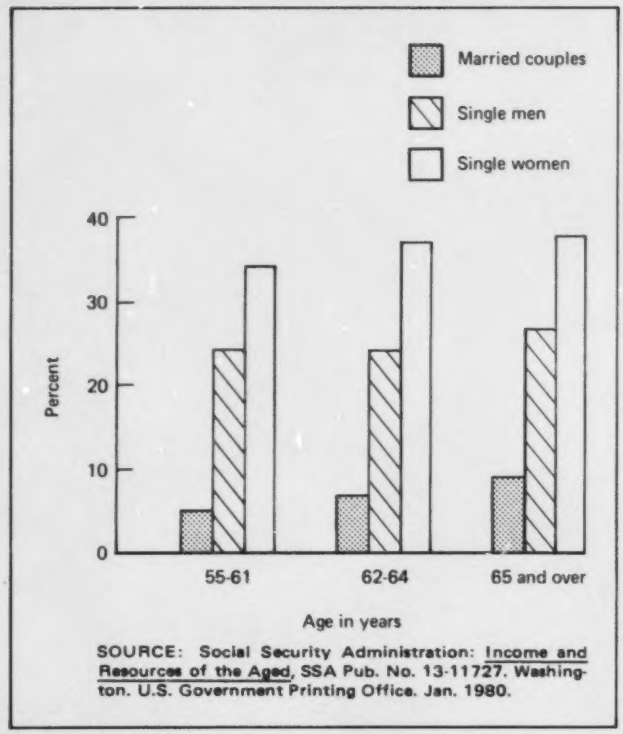
SOURCE: Social Security Administration: Income and Resources of the Aged, SSA Pub. No. 13-11727. Washington. U.S. Government Printing Office. Jan. 1980.

Figure 1. Percent of married and nonmarried units with earnings income: United States, 1976

women is the greater prevalence of chronic illnesses that cause limitations in how they live, and these are often multiple in number. According to self-reported data from the 1978 National Health Interview Survey (NHIS), elderly noninstitutionalized women had a higher prevalence than adult women aged 17-44 years and middle-aged women aged 45-64 years did for the following chronic conditions or impairments—visual impairments, hearing impairments, arthritis, hypertensive disease without mention of heart, coronary heart disease, cerebrovascular disease, diabetes, orthopedic impairments of the lower extremity and hip, chronic bronchitis, all diseases of the urinary system, functional and symptomatic upper gastrointestinal disorder, frequent constipation, and all anemia conditions (table 1).

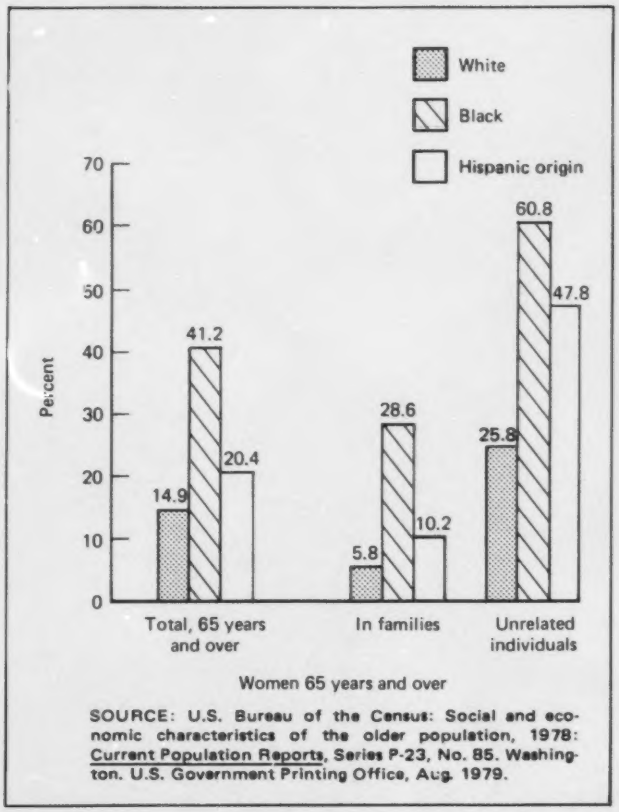
Many of these conditions are likely to coexist with other chronic conditions, particularly among the elderly. Persons with hypertension, for example, report having heart trouble, diabetes, and stroke at least 3 times more often than persons without hypertension do.[4] Persons with diabetes are also more likely than others are to have visual impairments (blindness is 25 times more common among diabetics than nondiabetics), cardiovascular disease, and hypertension.[5]

In this respect, the health problems of aging men are similar to those of aging women. What compli-



SOURCE: Social Security Administration: Income and Resources of the Aged, SSA Pub. No. 13-11727. Washington. U.S. Government Printing Office. Jan. 1980.

Figure 2. Percent of persons with income below poverty level, by marital status, sex, and age: United States, 1976



SOURCE: U.S. Bureau of the Census: Social and economic characteristics of the older population, 1978: Current Population Reports, Series P-23, No. 85. Washington. U.S. Government Printing Office, Aug. 1979.

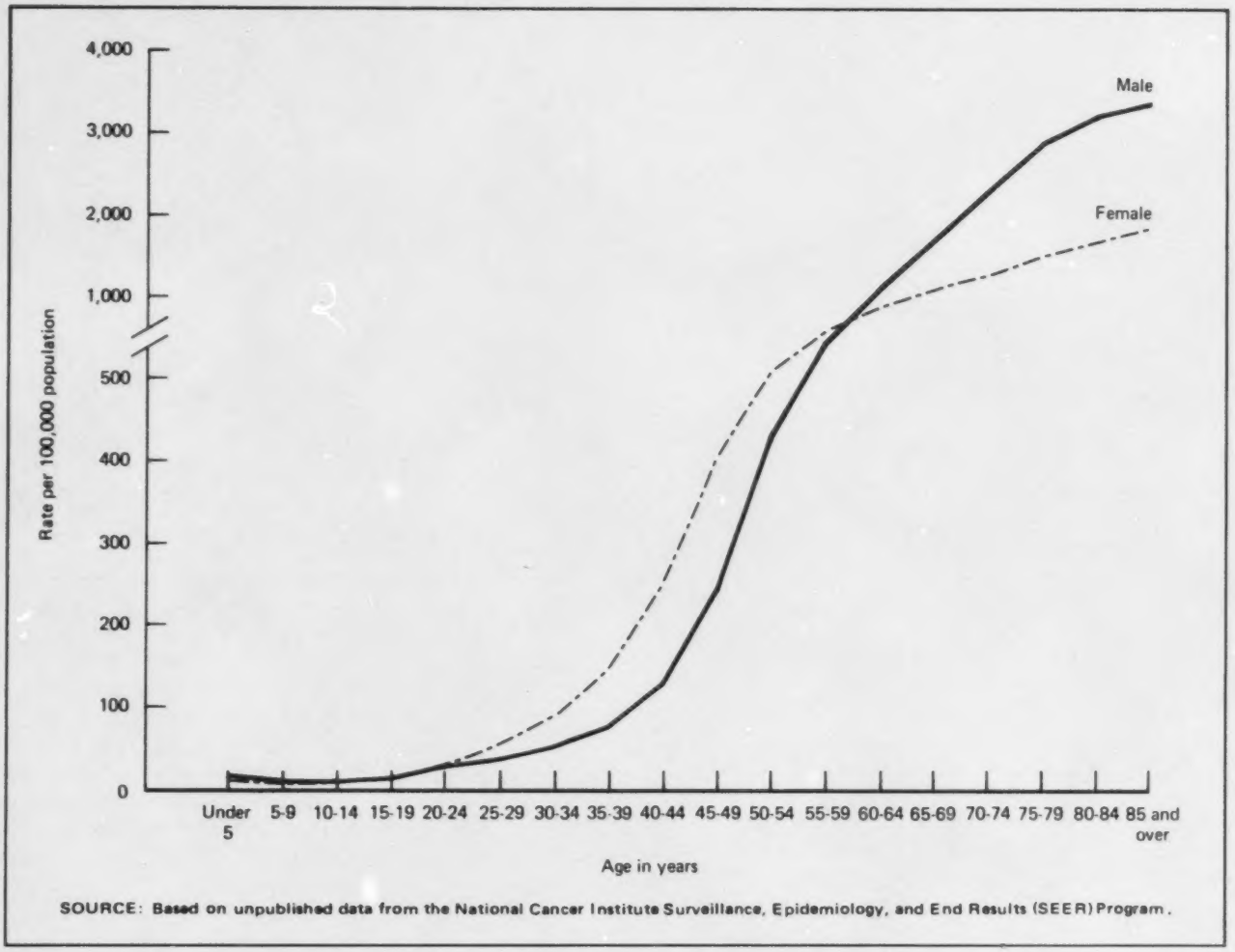
Figure 3. Percent of women 65 years of age and over below the povery level, by family status and race or Hispanic origin: United States, 1977

cates the picture for older women, however, is that they live longer, which means that they endure these chronic conditions longer. Women have higher rates of long-term chronic diseases while men have higher rates of fatal diseases. According to data from the NHIS, women report a higher prevalence of hypertensive disease without mention of heart, arthritis, diabetes, anemia, thyroid conditions, diseases of the urinary system, chronic sinusitis, gallbladder conditions (over 44 years of age), gastritis and duodenitis (over 44 years of age), diverticuli of the intestines (over 44 years of age), colitis and enteritis (over 44 years of age), visual impairments (over 64 years of age), orthopedic impairments involving back or spine, and orthopedic impairments of the lower extremities and hip (over 74 years of age) than men do.[6-11] Males report higher rates of heart conditions, cerebrovascular disease, ulcers, hernia, hearing impairments, speech defects, gout, and missing major and minor extremities.[6-11] In addition, unpublished data from the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) program show that the incidence of cancer was greater among elderly males than among elderly females (figure 4). The SEER survey was conducted in 10 regions of the United States from 1973-1977.[12]

Among elderly women, the prevalence of chronic conditions varies by race. Hypertensive heart disease, heart conditions, and arthritis are more frequent among elderly black women than among elderly white women.

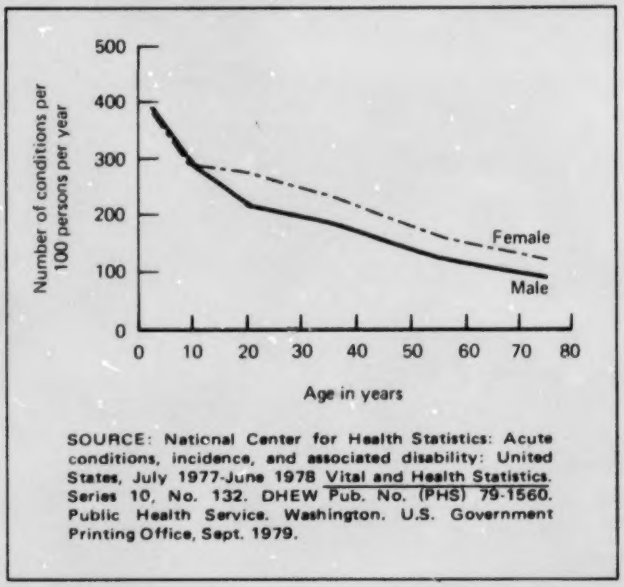
According to data from the 1978 NHIS, the incidence of acute conditions decreases with age, but from 17 years of age and over, women report more acute conditions per 100 persons in each successive age group than men do (figure 5). The number of acute conditions per 100 females 65 years of age and over was 121 compared with 97 per 100 males 65 years of age and over. One of the classes of acute conditions occurring more frequently in elderly women than in elderly men is injuries (including fractures, lacerations, contusions, burns, and other injuries) (figure 6). Osteoporosis, a condition in which bones become thin, brittle, and vulnerable to fractures, may be the underlying cause for the higher rate of these injuries to women because it is more common among elderly women than among elderly men.[13] Most of these injuries occurred either inside or on the grounds of their homes.[14]

In the remainder of this report, the special health problems of the older woman will be examined in relation to her use of the conventional health services in physicians' offices, hospitals, and nursing homes. However, prior to presentation of these patterns of use, a brief review of the three data sources is presented to assist in interpreting the data.



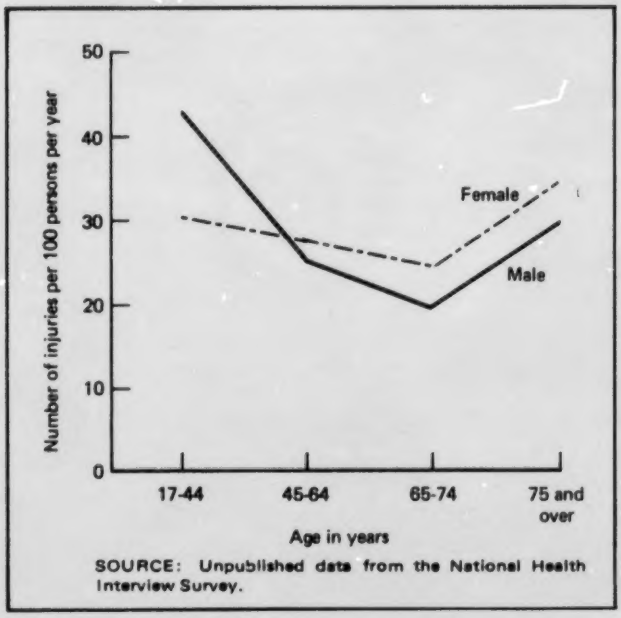
SOURCE: Based on unpublished data from the National Cancer Institute Surveillance, Epidemiology, and End Results (SEER) Program.

Figure 4. Incidence of malignant neoplasm in 10 regions, by age and sex: United States, 1973-77



SOURCE: National Center for Health Statistics: Acute conditions, incidence, and associated disability: United States, July 1977-June 1978 Vital and Health Statistics. Series 10, No. 132. DHEW Pub. No. (PHS) 79-1560. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1979.

Figure 5. Incidence of acute conditions per 100 persons per year, by age and sex: United States, July 1977-June 1978



SOURCE: Unpublished data from the National Health Interview Survey.

Figure 6. Incidence of acute injuries per 100 persons per year, by age and sex: United States, July 1977-June 1978

Sources and limitations of data

The estimates in this report are from the 1978 National Ambulatory Medical Care Survey (NAMCS), the 1978 National Hospital Discharge Survey (NHDS), and the 1977 National Nursing Home Survey (NNHS). The NAMCS is a continuing national probability sample of ambulatory medical encounters. The scope of the survey covers physician-patient encounters in the offices of nonfederally employed physicians classified as "office-based, patient-care" physicians by the American Medical Association or the American Osteopathic Association. Visits to physicians practicing in Alaska and Hawaii; visits to hospital-based physicians; visits to specialists in anesthesiology, pathology, and radiology; and visits to physicians who are principally engaged in teaching, research, or administration are excluded as well as telephone contacts and nonoffice visits. The sample for the 1978 NAMCS included 3,007 physicians, 466 of whom were not eligible (out of scope) at the time of the survey. Of the 2,541 physicians who were eligible, 1,850 (73 percent) actually participated. Data on office visits were obtained from a sample of 47,291 visits.

Data presented on hospital care are from the NHDS, which is a continuing nationwide sample survey of short-stay hospitals in the United States. The scope of NHDS encompasses patients discharged from hospitals, exclusive of military and Veterans Administration hospitals, located in the 50 States and the District of Columbia. Only hospitals having six beds or more for patient use and those in which the average length of stay for all patients is less than 30 days are included in the survey. The sample for 1978 NHDS included approximately 535 hospitals; 48 of these were either out of scope or out of business. Of the 487 in-scope hospitals, 413 (85 percent) actually participated. The sample of discharges obtained from participating hospitals included approximately 219,000 medical records.

Data presented on nursing home care are from the 1977 NNHS, which is a nationwide sample survey of nursing homes, residents, discharges, and staff. The scope of the 1977 NNHS encompassed all types of nursing homes, including personal care and domiciliary care homes in the conterminous United States. The sample for the 1977 NNHS included a national sample of 1,698 nursing homes; 166 were either out of scope or out of business. Of the 1,532 in-scope nursing homes, 1,451 (95 percent) actually participated. The sample of discharges from participating nursing homes included 5,142 discharges. Patient data from the 1977 NNHS were obtained from two samples of patients—those currently residing in the nursing homes and all patients discharged from the nursing home during the calendar year 1976. Data in this report are basically from the discharged resident sample, but selected data will be presented on residents who were residing in the nursing home.

Data presented from the NAMCS, NHDS, and NNHS (discharged resident sample) share several common characteristics:

1. The data were generally abstracted from patient health records. In the NAMCS, information was recorded on the encounter form, which supplied data on a systematic random sample of visits. In the NHDS, data were obtained from the face sheets of a sample of medical records of inpatients discharged from short-stay hospitals. Data from the NNHS on discharges from nursing homes were collected by interviewing a member of the nursing staff who referred to the medical records. Thus the data in this report are based on actual use of health resources as recorded on medical records.
2. The data reflect estimates of patient events rather than estimates of patients. In the NAMCS, the patient-physician encounter (visit) was the unit of analysis and the discharge event was the unit of analysis in the NHDS and NNHS. Sampled persons who visited a physician more than once dur-

ing the 7-day period of data collection were included in the sample as multiple visits, as were discharges from hospitals and nursing homes during the 1-year period of data collection.

3. Data on diagnoses in the NAMCS and NHDS were coded according to the *Eighth Revision of the International Classification of Diseases, Adapted for Use in the United States* (ICDA).[15] Data on diagnostic categories used in the NNHS, however, were collected according to medical nomenclature, but they were not coded according to the ICDA.

Because data in this report are national estimates based on a sample, they are subject to sampling errors. Tables and charts of standard errors used in the preparation of this report for each respective survey (NAMCS, NHDS, and NNHS) can be found in appendix I of previously published reports.[16-18] These appendixes also contain detailed descriptions of the survey methods, the sample designs, the data collection and processing procedures, and the estimation procedures.

Definitions of the terms used in this report are presented in appendixes I-III. Facsimiles of the Patient Record form used in the NAMCS, the Medical Abstract form used by participating hospitals in the NHDS, and the Discharged Resident Questionnaire used in the NNHS are presented in appendix IV. The reader is urged to review these appendixes for interpretation of the estimates presented in this report.

Ambulatory care in physicians' offices

Patient characteristics

Females of all ages made an estimated 349.2 million visits to office-based physicians in 1978, a national average of 3.2 visits for each female in the civilian noninstitutionalized population of the conterminous United States. Visits by women 65 years of age and over constituted the smallest proportion (16 percent) of this total, but their visit rate of 4.2 visits per person exceeded that of all other age groups (table A).

However, visits by older women were not as frequent for members of black and other races as they were for their white counterparts. In contrast to an average of 4.2 visits for each white woman 65 years and over, all other women of the same age visited at a rate of 3.5 per person per year. Visit rates for white women increased with age through the group 65-74 years of age, while rates for all other women remained constant from 25 to 74 years. Although about 17 percent of all visits by white women were made by patients 65 years of age and over, the comparable proportion for all other women was 10 percent.

These results by race are true of all visits in the NAMCS regardless of sex. Similar results were found in the NHIS, which shows that white persons tend to visit physicians' offices at a higher rate than members of other races do, while all other persons tend to seek medical care at settings other than physicians' offices at a higher rate than white patients do.[19]

Data on patients of Hispanic origin were not available from NAMCS until 1979. Because of the relatively small sample of office visits recorded for Hispanic women (as well as for men), analysis of these data was limited. Table B shows that women of Hispanic origin made 16.3 million visits (about 4.8 percent of all visits by women in 1979). About 10 percent of their visits were made by patients 65 years of age and over compared with about 18 percent by women of non-Hispanic origin. Because of problems

Table A. Number, percent distribution, and annual rate of office visits made by females, by race and age of patients: United States, 1978

Race and age	*Number of visits in thousands*	*Percent distribution*	*Number of visits per person per year*
All races			
All ages	349,244	100.0	3.2
Under 25 years	108,283	31.0	2.4
25-44 years	100,736	28.8	3.5
45-64 years	83,996	24.1	3.7
65-74 years	35,258	10.1	4.3
75 years and over	20,971	6.0	4.1
White			
All ages	308,706	88.4	3.3
Under 25 years	94,659	27.1	2.5
25-44 years	86,624	24.8	3.4
45-64 years	75,325	21.6	3.8
65-74 years	32,445	9.3	4.4
75 years and over	19,653	5.6	4.2
Black and all other			
All ages	40,538	11.6	2.7
Under 25 years	13,625	3.9	1.8
25-44 years	14,111	4.0	3.5
45-64 years	8,671	2.5	3.5
65-74 years	2,813	0.8	3.5
75 years and over	1,318	0.4	3.0

Table B. Number and percent distribution of office visits made by females by age of patient, according to Hispanic or non-Hispanic origin: United States, 1979

Age	*Hispanic origin*	*Non-Hispanic origin*
	Number of visits in thousands	
All ages	16,284	320,811
	Percent distribution	
Total	100.0	100.0
Under 65 years	90.1	82.4
65-74 years	6.3	10.2
75 years and over	3.6	7.4

in establishing an appropriate population base, visit rates were not calculated for non-Hispanic or Hispanic patients.

Patient condition

Physician specialty.—Patient preference, or need, for care from a particular medical specialist tends to be modified with age. This finding is not surprising in view of the changing health needs of the elderly. Although proportions of visits to general and family practitioners and general surgeons were about the same for middle-aged (45-64 years of age) and elderly (65 years of age and over) patients, visits to ophthalmologists increased. On the other hand, visits to obstetrician-gynecologists and psychiatrists decreased (table C).

Diagnosis.—Table 2 provides a comparison of visits by women in three age groups based on diagnostic categories. These data show the pattern of change in health status with advancing age. For middle-aged patients (45-64 years of age) mental disorders, diseases of the respiratory system, and diseases of the genitourinary system constituted relatively higher proportions of total visits than they did for older women. Patients 65 years of age and over were seen proportionately more often for diseases of the nervous and circulatory systems.

The leading principal diagnoses made for women 65 years of age and over are listed by rank in table 3. In NAMCS, the principal (first-listed) diagnosis is the physician's diagnosis based on the most important reason for the patient's visit. Conditions commonly associated with older patients such as hypertension, heart disease, diabetes, arthritis, cataracts, and glaucoma accounted for about one-third of their visits.

Table C. Number and percent distribution of office visits made by women by physician specialty, according to age of patient: United States, 1978

Physician specialty	Age		
	45-64 years	65-74 years	75 years and over
	Number of visits in thousands		
All specialties	83,996	35,258	20,971
	Percent distribution		
Total	100.0	100.0	100.0
General and family practice	38.5	38.8	39.5
Internal medicine	17.1	22.4	24.0
General surgery	7.5	7.5	7.8
Obstetrics and gynecology	7.7	2.3	*0.9
Orthopedic surgery	3.8	3.2	2.5
Cardiovascular diseases	1.8	2.4	2.3
Dermatology	3.0	2.6	2.4
Urological surgery	1.5	1.7	*1.5
Ophthalmology	6.5	9.5	12.9
Otolaryngology	2.2	2.5	2.2
Psychiatry	2.6	1.2	*0.4
All other	6.8	5.9	3.6

Visit rates for all other women 65 years of age and over were higher than those of their white counterparts for essential benign hypertension, diabetes mellitus, arthritis, and glaucoma; white women visited at higher rates for heart disease, osteoarthritis, cataracts, and neuroses (table D).

Comparison of prevalence and visit rates.—The degree of utilization of office-based physicians by patients with specific conditions may be examined by comparing prevalence rates from the NHIS and visit rates from the NAMCS among selected groups of patients. Where a prevalence rate for a diagnosis is higher for one group than for another, it would be expected that the visit rate would be proportionately higher for the same group. Table E shows prevalence and visit rates for six chronic conditions. (Visit rates are not the same as those in table 6 because several ICDA codes were aggregated to match those used in the prevalence rates based on NHIS data.) Comparisons between middle-aged and elderly women and between white women and women of black and all other races 65 years of age and over may be made by using this table. All prevalence and visit rates shown in table E were higher for elderly women than they were for middle-aged women. However, except for patients with arthritis, the percents of difference in visit rates were higher than those in the corresponding prevalence rates. For example, the prevalence rate of cerebrovascular disease was about twice as high among elderly women as among middle-aged women; but the visit rate for older women was almost seven times higher. These data suggest that the average woman aged 65 years and over suffering from cerebrovascular disease was likely to visit the physician more frequently than a middle-aged woman with the same problem. A similar conclusion could be drawn for women with diabetes mellitus, hypertensive disease, and coronary heart disease. Prevalence

Table D. Annual rate of office visits made by women 65 years of age and over, by race of patient and selected principal diagnoses: United States, 1978

Principal diagnosis and ICDA code[1]		Race	
		White	Black and all other
		Visit rate per 1,000 population	
Essential benign hypertension	401	450.4	566.7
Chronic ischemic heart disease	412	266.9	156.9
Diabetes mellitus	250	165.7	175.0
Osteoarthritis and allied conditions	713	143.1	109.7
Cataract	374	130.5	82.5
Arthritis, unspecified	715	85.0	130.7
Symptomatic heart disease	427	81.1	16.2
Glaucoma	375	66.7	72.2
Neuroses	300	67.3	29.0
Medical and surgical aftercare	Y10	53.9	42.0

[1]See reference 15.

Table E. Prevalence rate with percent of difference and visit rate with percent of difference among women, by age, race, and selected chronic conditions: United States, 1978

Chronic condition and ICDA code[1]	Age of patient		Percent of difference[2]	Race of patients 65 years and over		Percent of difference
	45-64 years	65 years and over		White	Black and all other	
	Rate per 1,000 population			Rate per 1,000 population		
Diabetes mellitus (250)						
Prevalence rate	59.4	93.9	58	93.0	*103.4	4 11
Visit rate	88.2	166.5	89	165.7	174.9	4 6
Hypertensive disease (400, 401, 403)						
Prevalence rate	198.3	302.1	52	292.4	397.4	4 36
Visit rate	281.2	462.9	65	451.6	572.9	4 27
Coronary heart disease (410-414)						
Prevalence rate	28.4	78.8	177	82.2	*46.0	3 79
Visit rate	79.7	312.0	291	317.6	257.1	3 24
Cerebrovascular disease (430-438)						
Prevalence rate	10.8	34.6	220	32.5	*55.0	4 69
Visit rate	10.1	76.2	654	76.1	77.4	4 2
Arthritis (710-715)						
Prevalence rate	304.0	522.1	72	522.0	523.4	-
Visit rate	162.5	270.6	66	270.4	272.4	-

[1] See reference 15.
[2] All rates are higher for patients 65 years of age and over.
[3] Rate is higher for white race.
[4] Rate is higher for black and all other races.

and visit rates for arthritis appear to be more congruent.

According to the data shown in table E, women 65 years of age and over of black and all other races had a higher prevalence rate for hypertensive disease than white women had. However, the difference in these rates was not matched by a similar increase in the visit rate, which was lower than expected. This difference is not surprising in view of the lower rate of physician visits by all other women. On the other hand, coronary heart disease was 79 percent more prevalent among white women than among women of all other races, but their visit rate was only 24 percent greater. No obvious reason for this difference was found.

Table F includes similar types of data according to the sex of the elderly patient. Prevalence rates were higher for men with coronary heart disease and cerebrovascular disease; women had a greater prevalence of diabetes mellitus, hypertensive disease, and arthritis. Except for cerebrovascular disease, higher visit rates reflected higher prevalence rates, but the two rates were not always consistent. Despite 31 percent more diabetes among women, their visit rate for this condition was only 5 percent higher than that for men. Rates for hypertensive disease and arthritis were also disproportionate. Elderly men had an 18-percent higher prevalence rate for coronary heart disease than elderly women had, but in a reversal of the apparent trend, men visited physicians at a rate that was 47 percent higher than that for women. This finding was not true for cerebrovascular disease, however, where the condition was 72 percent more prevalent among men than among women; but women visited physicians at a 14 percent higher rate than men did.

Table F. Prevalence rate with percent of difference and visit rate with percent of difference among patients 65 years of age and over, by sex of patient and selected chronic conditions: United States, 1978

Diagnosis and ICDA code[1]	Sex		Percent of difference
	Female	Male	
	Rate per 1,000 population		
Diabetes mellitus (250)			
Prevalence rate	93.9	71.9	31
Visit rate	166.5	158.6	5
Hypertensive disease (400, 401, 403)			
Prevalence rate	302.1	179.5	68
Visit rate	462.9	302.5	53
Coronary heart disease (410-414)			
Prevalence rate	78.8	93.3	18
Visit rate	312.0	459.2	47
Cerebrovascular disease (430-438)			
Prevalence rate	34.6	59.5	72
Visit rate	76.2	66.9	14
Arthritis (710-715)			
Prevalence rate	522.1	303.1	72
Visit rate	270.6	176.8	53

[1] See reference 15.

Table G. Number of visits made by women 65 years and over for selected principal diagnoses by percent of most frequent second- or third-listed diagnosis: United States, 1978

Second- or third-listed diagnosis and ICDA code[1]	Principal diagnosis and ICDA code[1]			
	Diabetes mellitus, 250	Hypertensive disease, 400, 401, 403	Coronary heart disease, 410-414	Arthritis, 710-715
	Number of visits in thousands			
All visits	2,224	6,182	4,166	3,614
	Percent			
Diabetes mellitus 250	-	8.6	9.6	*6.0
Hypertensive disease 400, 401, 403	33.3	-	-	13.6
Coronary heart disease 410-414	*10.6	-	-	8.6
Arthritis 710-715	*6.2	7.0	10.5	-

[1]See reference 15.

It is apparent from these data that some conditions create greater impetus for physician visits for different groups of patients than others do. Additional research on physician visits focusing on specific problems of the elderly may provide some insight as to why patients with certain conditions underutilize available health care.

Concomitant diagnoses.—Four chronic illnesses that are prominent among *principal* diagnoses for the elderly are also frequently listed as the second or third diagnoses on the NAMCS Patient Record form. Because the priority of listing up to three diagnoses in the NAMCS is related to the patient's most important reason for visit, the principal diagnosis, which is the more urgent problem at one visit may be the less urgent problem at the next visit. However, the patient can have multiple conditions. Table G shows that each of diabetes mellitus, hypertensive disease, coronary heart disease, and arthritis was frequently concomitant with one or more of the other three. The strongest association in visits was between diabetes mellitus and hypertensive disease—a direct reflection of multiple problems reported in the NHIS. In about one-third of the 2.2 million visits in which diabetes mellitus was the principal diagnosis, hypertensive disease was the second- or third-listed disease. Where hypertensive disease was listed first, 9 percent of those patients also had diabetes mellitus. Other data in table G may be similarly analyzed.

Other conditions were present in these visits by elderly women, but they were less frequently found in the estimates. Because of the limitations of the sample, valid conclusions cannot be drawn about other concomitant diagnoses.

Return visit rate.—A measure of physician use may be obtained from the return visit rate, which is the ratio of return visits to the number of visits in which a new problem is presented—that is, the degree to which a patient with a specific illness returns for treatment. This degree is often dictated by the nature of the ailment, but it also includes elements of patient motivation and physician encouragement. It is difficult to separate the three. As table H shows, these return visit rates varied according to the diagnosis, with chronic conditions in the upper range, as expected. Physician utilization was relatively high for both middle-aged and elderly women who had hypertension, heart disease, diabetes, and glaucoma. However, elderly women had consistently higher return rates than middle-aged patients had. Physician utilization for cataract was an exception because correction by surgery decreased the probability of many return visits. As will be shown in the section entitled "Hospital care," extraction of lens to correct cataract was one of the most common surgical procedures performed on elderly women.

Table H. Return visit rate of office visits made by women, by age of patient and selected principal diagnosis: United States, 1978

Principal diagnosis and ICDA code[1]	Age	
	45-64 years	65 years and over
	Return visit rate[2]	
All diagnoses	2.1	3.0
Essential benign hypertension 401	9.9	15.7
Chronic ischemic heart disease 412	13.3	13.9
Diabetes mellitus 250	13.1	22.6
Osteoarthritis and allied conditions 713	2.0	3.8
Cataract 374	2.7	2.4
Arthritis, unspecified 715	2.7	9.1
Symptomatic heart disease 427	2.9	3.8
Glaucoma 375	12.8	38.9
Neuroses 300	4.6	7.6
Medical and surgical aftercare Y10	6.4	8.9

[1]See reference 15.
[2]The return visit rate is the ratio of return visits to new problem visits.

The direction of the curves plotted in figure 7 illustrates how visit rates increased with age for hypertension, heart disease, arthritis and rheumatism, and diabetes mellitus. The rates for hypertension and diabetes decreased, however, after 74 years of age. This decrease was consistent with a slight decline in

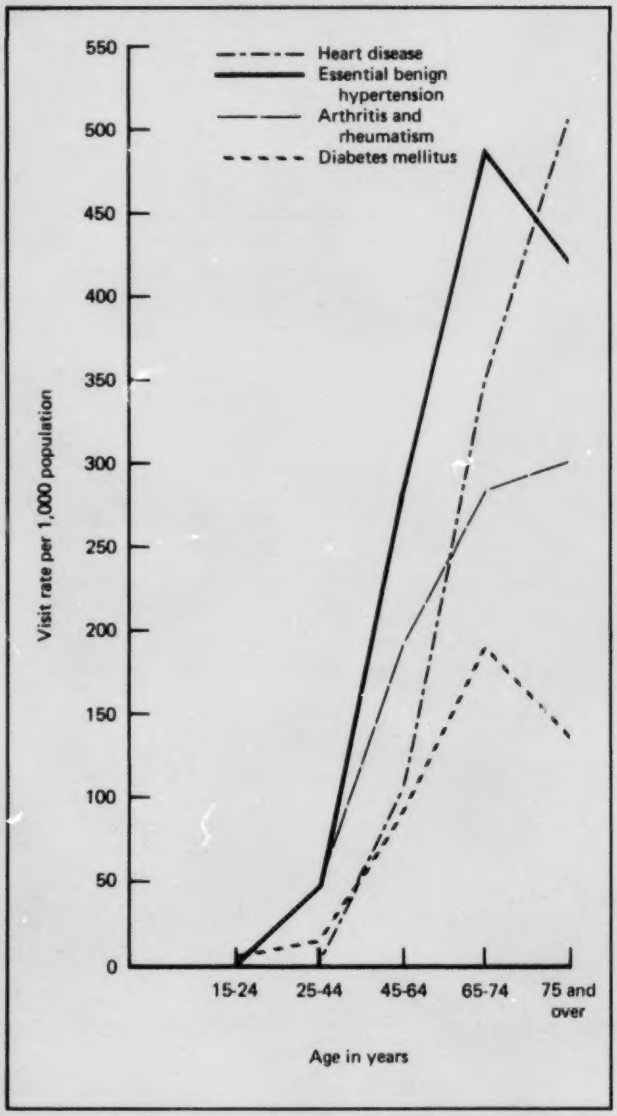


Figure 7. Annual rate of office visits made by women for essential benign hypertension, heart disease, diabetes mellitus, and arthritis and rheumatism, by age of patient: United States, 1978

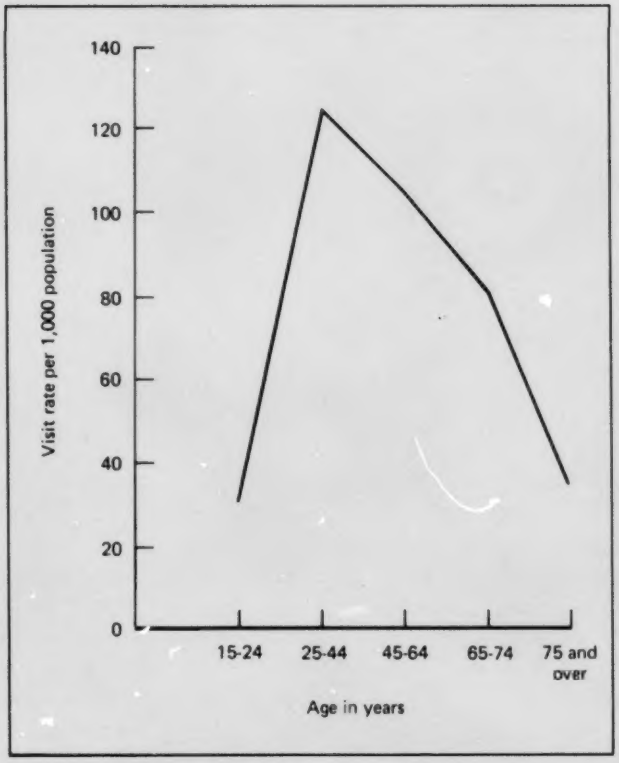


Figure 8. Annual rate of office visits made by women for neuroses, by age of patient: United States, 1978

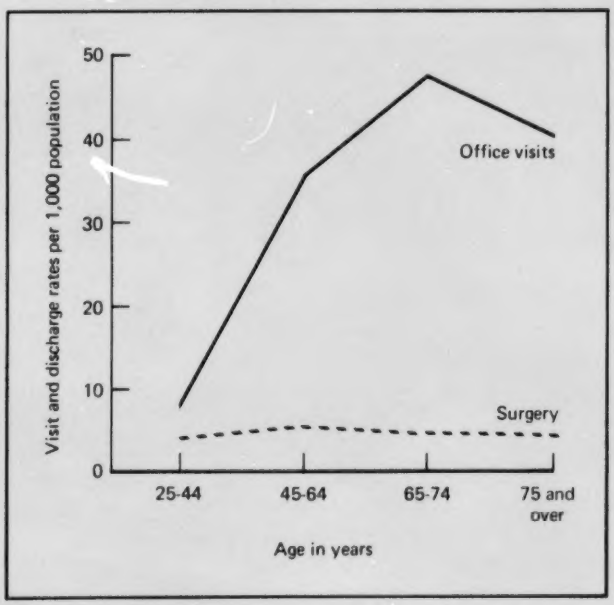


Figure 9. Annual rate of office visits made by women for malignant neoplasm of breast and rate of hospital discharges for breast surgery, by age of patient: United States, 1978

the prevalence rate for women aged 75 years and over with these conditions.

Physicians see elderly women more frequently for physical illnesses than for mental conditions. Figure 8 shows that the rate of visit for neuroses declined rapidly after 44 years of age. For patients 65 years of age and over, a proportion of this decrease may be due to limitations on Medicare coverage for psychiatric services.

The rate of women visiting a physician for malignant neoplasm of breast quadrupled from the childbearing years (25-44 years) to middle age (45-64 years) (figure 9). However, according to physician visit data, this problem was not overcome during the later years. A 35-percent increase was found in the visit rate from middle age to those aged 65-74 years, and then only a 15-percent decrease occurred in the rate of visits by women 75 years of age and over. This decrease was smaller than expected considering the reduction of the at-risk population through surgical intervention and death by 75 years of age. The rates

of hospital discharges for breast surgery varied little from the youngest to the oldest age group indicating the continued use of surgical procedures during old age (figure 9).

Despite the rising rate of visits for breast malignancies, the rates of breast examinations decreased with age. According to the data collected during the health interviews in 1973, less than half the women 65 years of age and over reported having had a breast examination within the prior year compared with over three-fourths of the women 17-24 years of age.[20] Among the elderly women interviewed, about 18 percent had not had a breast examination for 5 years or more. However, these figures may have changed by 1978.

Seriousness of condition.—Morbid conditions of elderly women tended to be evaluated by private physicians as "serious" or "very serious" proportionately more frequently than those of younger age groups (figure 10). The high proportion of not serious visits (57 percent) for women 25-44 years of age reflects the large number of nonillness visits during the childbearing years. This proportion decreased to 30 percent for patients 75 years of age and over. At the same time, the proportion of visits judged "serious" or "very serious" increased from 14 percent for the youngest age group to 33 percent for the oldest age group, reflecting the chronic conditions presented by the elderly.

Patient management

Services.—Proportions of diagnostic and therapeutic services did not change appreciably with the age of the patient (table 4). The small increases in the proportions of electrocardiograms, vision tests, and

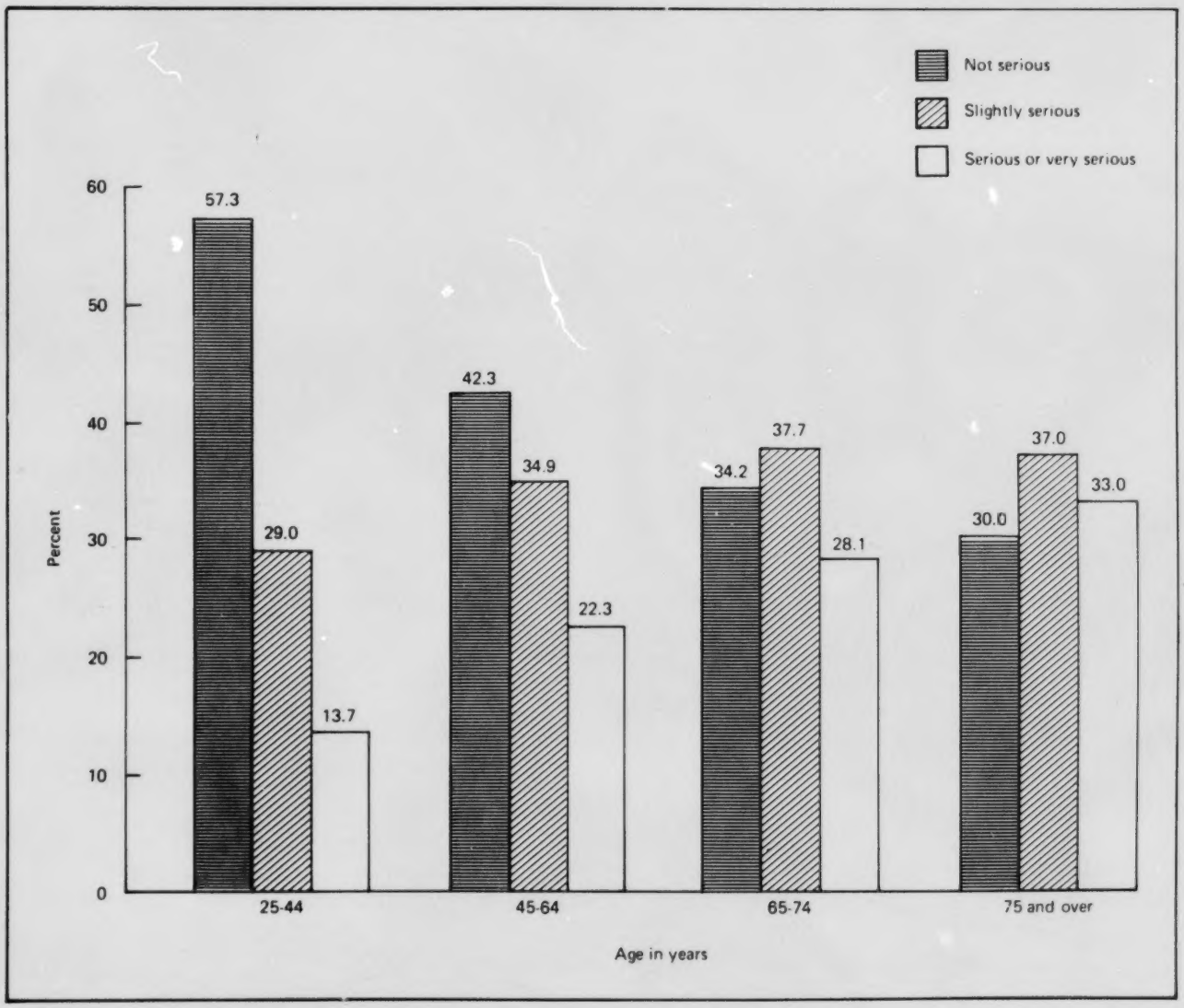


Figure 10. Percent of office visits made by women, by seriousness of condition and age of patient: United States, 1978

blood pressure checks given to patients over 64 years of age reflect the onset of gerontological problems. The decrease in the proportion of Pap tests performed during visits was consistent with the decreased rate of that test as a reason for visit which is discussed in the section entitled "Preventive care."

Drug prescription, the principal therapy employed during all visits regardless of age, tended to increase slightly from middle to old age. The NAMCS included data on specific medication therapy beginning with 1980 and this information will be available in future publications from the National Center for Health Statistics. This information will be of special interest regarding the elderly in terms of the influence of age and sex on ordering psychotropic drugs and of the extent of use of prescriptions with generic terms.

Preventive care.—Speculation about the elderly patient's continuing concern for preventive care has provided little definitive response. Some evidence (for and against such motivation) is offered by the item "reason for visit" in the NAMCS. In this item, the physician records the symptom, complaint, or other reason for the visit as accurately as possible in the patient's own words (as opposed to the diagnosis determined by the physician). Figure 11 shows the visit rate curves for women who visited physicians for the *stated* purpose of obtaining general medical examinations, blood pressure tests, and Pap smears. (The number of visits used to calculate these rates were based on the patient's expressed reason for the visit and may not agree with the actual number of visits in which the services were rendered.) These examinations are an essential part of good health maintenance. The visit rates for general medical examinations and blood pressure tests reflect awareness of the need for these visits, at least until 74 years of age, after which rates for both reasons fell. However, blood pressure measurement was often included in the physician's workup regardless of the patient's reason for the visit. This situation was particularly true for elderly patients where at least half of their visits included blood pressure monitoring (see table 4).

Pap tests were clearly not a high priority among women after 44 years of age because visit rates for this reason fell sharply at the end of the childbearing years. Opinions vary regarding the appropriate intervals between Pap tests, with some medical researchers reporting that older women do not require these tests as often as younger women do. National statistics, however, may support the contention that the need for detection of cervical cancer does not decrease with age. Hospitalizations in 1978 for cervical cancer were more frequent for women aged 65 years and over than for those aged 45-64 years (81 versus 72 per 100,000 population). Death rates provide even more stark evidence for testing beyond middle age. Figure 12 illustrates that mortality rates due to cervical cancer showed a continuous increase with advancing age. However, the most compelling evidence is offered by the age-specific incidence rates of malignant neoplasm of the cervix uteri. These rates, plotted in figure 13, show increasing rates by age for newly diagnosed cases found in the National Cancer Institute's SEER program.[12] This study showed that incidence rates were greatest where Pap smears were

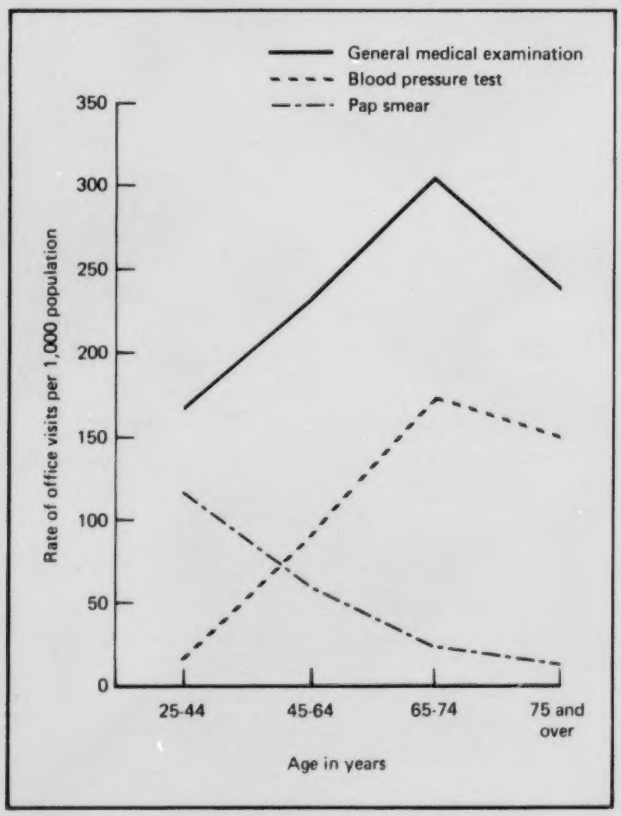


Figure 11. Annual rate of office visits made by women for general medical examination, blood pressure test, and Pap smear, by age of patient: United States, 1978

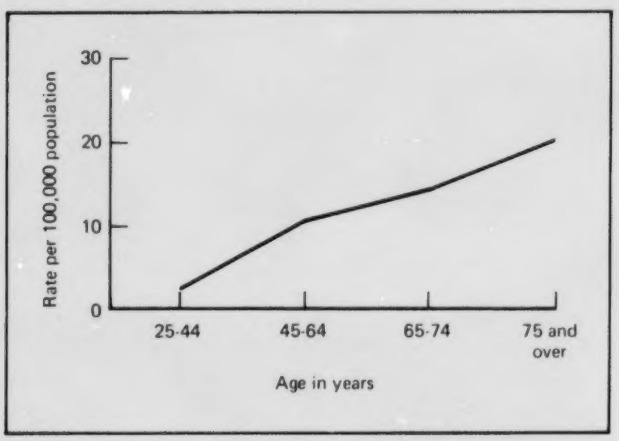
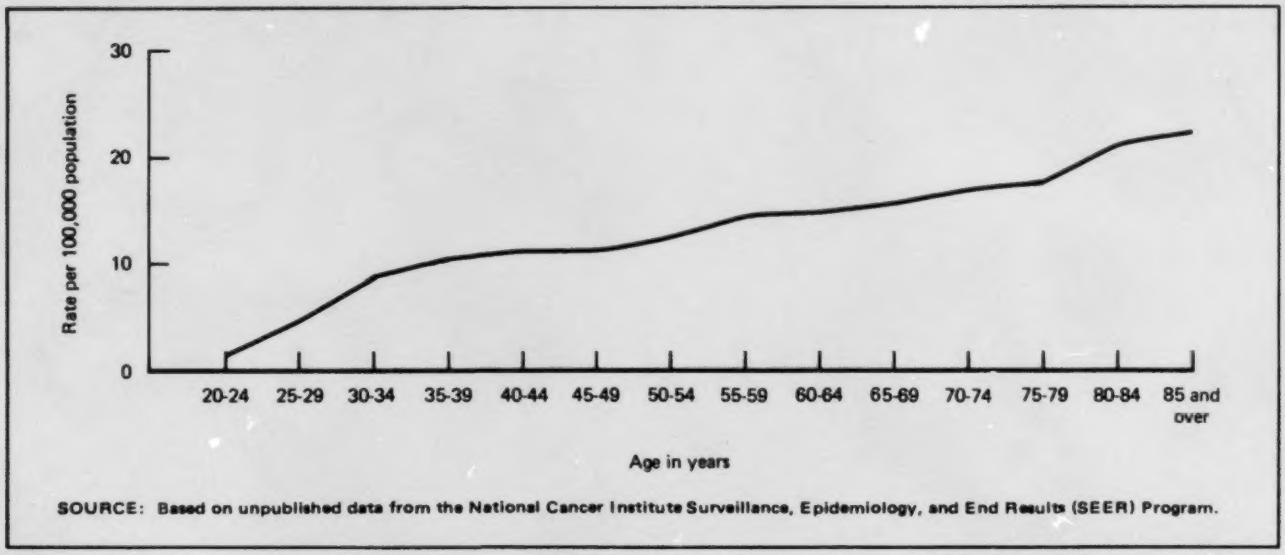


Figure 12. Death rate for malignant neoplasm of cervix uteri, by age of patient: United States, 1976



SOURCE: Based on unpublished data from the National Cancer Institute Surveillance, Epidemiology, and End Results (SEER) Program.

Figure 13. Incidence of malignant neoplasm of the cervix uteri among women in 10 regions, by age of patient: United States, 1973-77

performed more frequently. This finding supports the need for testing regardless of age.

Outcome

Disposition.—Continuity of care of elderly women by private physicians is reflected not only by the high return visit rate discussed earlier, but also by the physician's disposition of the visit (table J). The most common conclusion of the elderly woman's visit was the physician's instruction to return at a specified time (72 percent). In only about 5 percent of the visits no followup was planned. About 2 percent of these patients were referred to another physician and about 3 percent, or 1.6 million, were admitted to a hospital from a private physician's office. The section entitled "Hospital care" shows that about three times that number were discharged from short-stay hospitals in 1978. However, note that patients may enter hospitals from sites other than physicians' offices and may be admitted more than once.

Table J. Number and percent distribution of office visits made by women 65 years of age and over, by disposition of visit: United States, 1978

Disposition	*Number of visits in thousands*	*Percent distribution*[1]
All visits	56,230	100.0
No followup planned	3,010	5.4
Return at a specified time	40,200	71.5
Return if needed	10,196	18.1
Telephone followup	1,912	3.4
Referred to another physician or agency	1,234	2.2
Returned to referring physician	534	1.0
Admit to hospital	1,620	2.9
Other disposition	424	0.8

[1]Percents will not add to 100.0 because more than 1 disposition was possible.

Hospital care

Patient characteristics

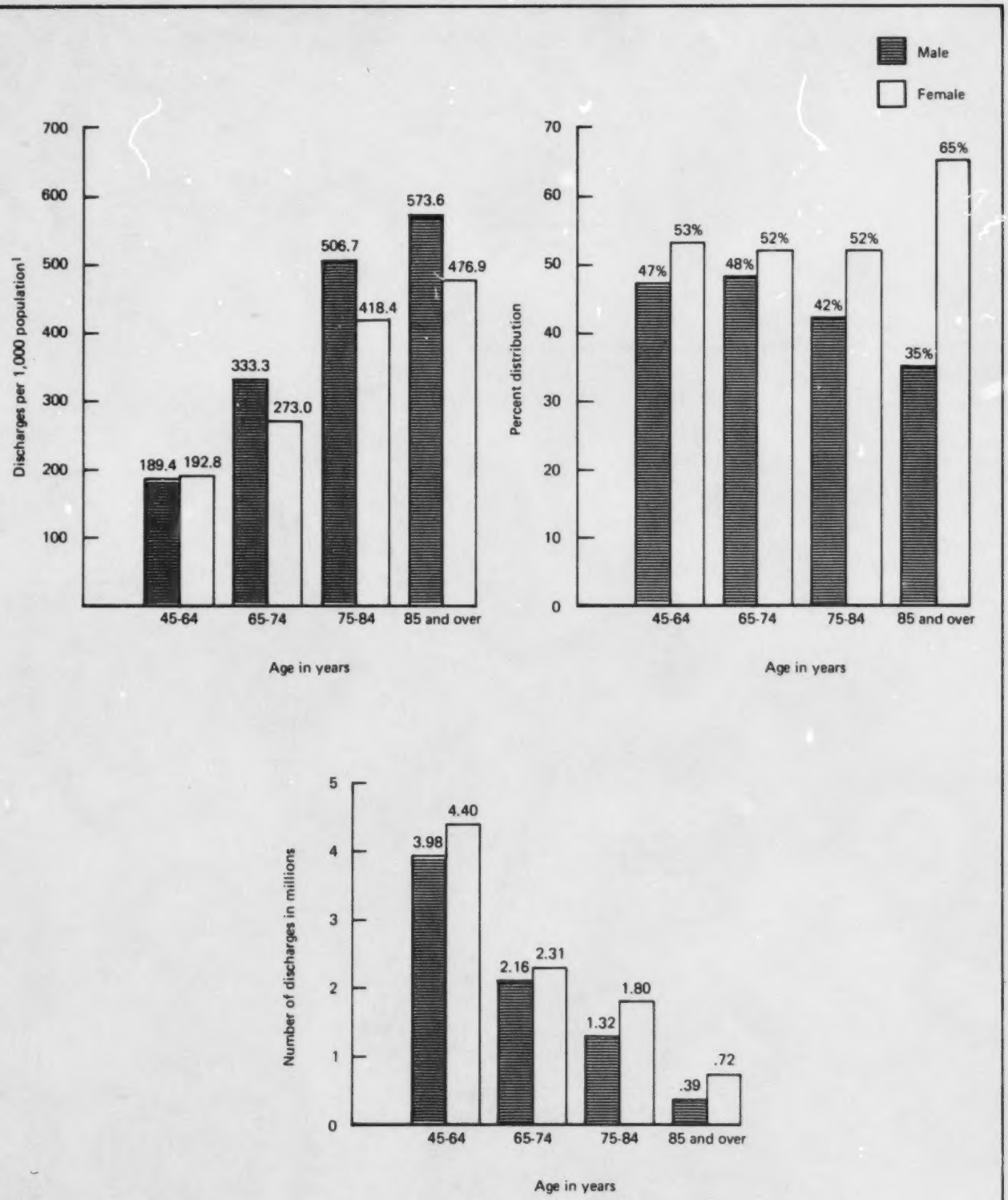
In 1978, an estimated 4.8 million women 65 years of age and over were discharged from non-Federal short-stay hospitals. Although the proportion of women discharged exceeded that of men in the age groups 64 years and over (65-74 years, 75-84 years, and 84 years and over), the hospital utilization rate (discharges per 1,000 population) for men exceeded that for women in all of the same age categories (figure 14). As previously mentioned, this finding may be due to the greater incidence among men of fatal diseases such as coronary heart disease, cancer, and cerebrovascular disease for which the appropriate locus of treatment is the acute care hospital. As a result of these diseases, elderly men had more all-listed surgical operations (197 per 1,000 population) than elderly women had (155 per 1,000 population) and required more days of care (4,330 days of care per 1,000 population) than elderly women did (4,081 days of care per 1,000 population).[17] The greater use of these hospital resources by elderly men suggests that they use a different and more intensive mixture of hospital services than elderly women do. Figure 14 also shows that the need for hospitalization was higher for both sexes after 65 years of age.

Among women patients 65 years of age and over discharged from hospitals, 3.9 million patients were identified on the medical record as white and 328,000 patients were identified as members of black or all other races. However, race was not reported for an additional 622,000 elderly patients, a larger number than in the black and all other racial group. To compute utilization rates for elderly women by race, race was imputed by distributing those for whom race was not stated in the same proportions as those for whom race was identified. (This computation was done because a comparison of utilization measures for patients with race stated and not stated suggested that patients with race not stated were probably distributed by race in about the same proportions as those for whom race was identified.[17]) This method showed that the rate of hospital use was lower for elderly women of black and all other races (291 per 1,000 population) than for their white counterparts (343 per 1,000 population) (figure 15). The reason for this lower rate may be a greater tendency of black than of white women to delay treatment until later stages of diseases.[21] Perhaps, patient motivation combined with low socioeconomic status are major determinants in the use of hospital resources for black and all other elderly women. Medicare, a nationwide health insurance program, provides hospital insurance to all persons aged 65 years and over, but it does not cover all charges. According to a study of the health status of minorities and low-income groups, a larger proportion of physician visits by black and all others (38 percent) than by their white counterparts (31 percent) were for mandatory care.[22] Mandatory care in that study is defined as that care for which a person should or must see a physician, as compared with elective care which is defined as preventive care, relief of symptoms only, or that which would not be affected by treatment. The same study found that black and all other persons received fewer preventive services, on the average, than white persons did. Thus it is possible that this hesitation on the part of black and all other persons to seek comprehensive medical care may also apply in the use of hospitals by elderly black and all other women.

Proportions by marital status for elderly women discharged from hospitals generally were similar to those found among the civilian noninstitutionalized population of elderly women with one exception. A slightly higher proportion of widows was found among elderly women discharged from hospitals (59 percent) than among civilian noninstitutionalized elderly women (52 percent) (table K).

Patient condition

First-listed diagnosis: comparison with office visits.—The first-listed diagnosis on the hospital

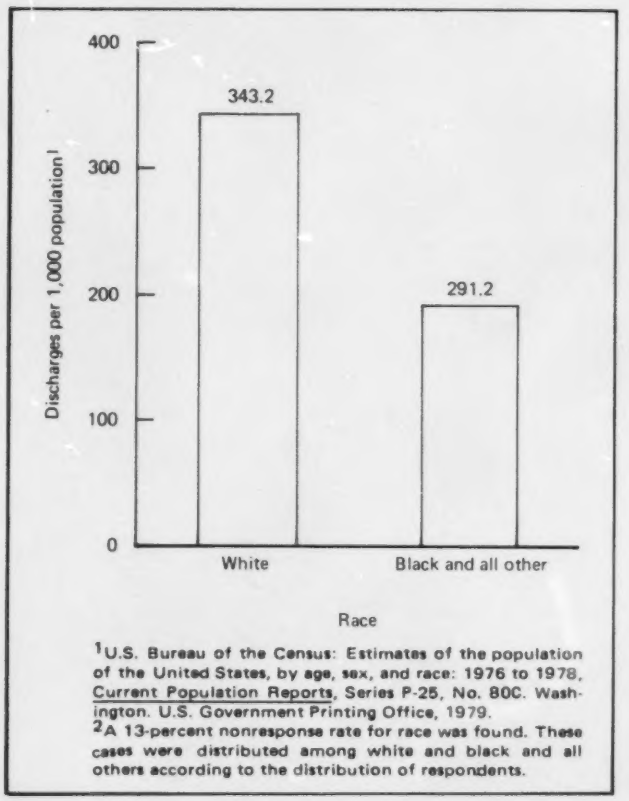


[1]U.S. Bureau of the Census: Estimates of the Population of the United States, by age, sex, and race: 1976 to 1978, Current Population Reports, Series P-25, No. 800. Washington. U.S. Government Printing Office, 1979.

NOTE: Discharges from non-Federal short-stay hospitals, excluding newborn infants.

Figure 14. Number, percent distribution, and rate of patients discharged from short-stay hospitals, by sex and age of patient: United States, 1978

record is not necessarily the most important one at that admission as it is for that visit on the Patient Record form used in NAMCS. However, some comparison of utilization of physicians' offices and inpatient facilities based on diagnosis may be drawn. The obvious differences in the care offered in physicians' offices and short-stay hospitals are reflected by the diagnoses recorded for elderly patients.



[1]U.S. Bureau of the Census: Estimates of the population of the United States, by age, sex, and race: 1976 to 1978, Current Population Reports, Series P-25, No. 80C. Washington. U.S. Government Printing Office, 1979.
[2]A 13-percent nonresponse rate for race was found. These cases were distributed among white and black and all others according to the distribution of respondents.

Figure 15. Number of women 65 years of age and over discharged from short-stay hospitals, by race:[2] United States, 1978

Table K. Percent distribution of women 65 years of age and over discharged from short-stay hospitals or noninstitutionalized, by marital status: United States, 1978

Marital status	*Hospital discharges*[1]	*Noninstitutionalized population*[2]
	Percent distribution	
All marital statuses	100.0	100.0
Married	31.2	36.7
Widowed	59.0	52.0
Divorced	2.8	3.2
Separated	0.4	1.8
Never married	6.6	6.2

[1]Excludes 4.3 percent of elderly female patients discharged with unknown marital status.
[2]Based on population data from the U.S. Bureau of the Census: Social and economic characteristics of the older population: 1978. Current Population Reports, Series P-23, No 85. Washington. U.S. Government Printing Office, Aug. 1979.

Long-term chronic conditions such as diabetes mellitus, hypertensive disease, and osteoarthritis and allied conditions constituted larger proportions of the physician's practice than of hospital discharges (table L). On the other hand, elderly patients with life-threatening diseases such as chronic ischemic heart disease, congestive heart failure, cerebrovascular disease, and pneumonia use hospital care proportionately more often than they use office care. As expected, patients with diagnoses requiring surgery such as malignant neoplasms, cholelithiasis and other gastrointestinal conditions, and fractures used hospital facilities to a greater degree than they used physicians' offices. Patients with diagnoses of neuroses, who constituted about 2 percent of private medical practice (table 3) were not seen as often in hospitals, and patients with diagnoses of psychoses, who constituted about 1 percent of hospital discharges, were not seen as often in private medical practice (0.6 percent).

First-listed diagnosis and patient age.—The most frequent first-listed diagnoses recorded on the hospital records for different age groups of women are shown in table 5. This method of tabulation highlights the pre-eminence of some diagnoses over others depending on the age of the patient. Although

Table L. Number and percent of office visits made by women 65 years of age and over and number and percent discharged from short-stay hospitals, by selected first-listed diagnoses: United States, 1978

First-listed diagnosis and ICDA code[1]	*Office visits*	*Hospital discharges*
	Number in thousands	
Total	56,230	4,833
	Percent	
Malignant neoplasms of breast, uterus, and other female genital organs. . .174, 180-184, 199.2, 199.3, 199.4	1.2	2.8
Diabetes mellitus 250	4.0	2.8
Anemias 280-285	1.9	1.2
Psychoses 290-299	0.6	1.1
Cataract 374	3.0	3.5
Hypertensive disease 400-404	11.6	1.6
Chronic ischemic heart disease 412	6.1	8.3
Congestive heart failure 427.0	1.8	2.9
Cerebrovascular disease 430-438	1.8	5.6
Arteriosclerosis 440	0.7	0.7
Acute bronchitis and bronchiolitis 466	0.4	0.8
Pneumonia 480-486	*0.4	3.2
Bronchitis, chronic and unqualified . 490-491	1.1	0.8
Ulcer of stomach; ulcer of duodenum; peptic ulcer, site unspecified; and gastrojejunal ulcer 531-534	*0.4	1.1
Gastritis and duodenitis 535	*0.4	0.7
Diverticula of intestine 562	*0.4	1.2
Cholelithiasis 574	*0.4	1.7
Uterovaginal prolapse 623	*0.5	0.9
Osteoarthritis and allied conditions 713	3.3	1.9
Fracture of neck of femur, upper limb, and other and multiple sites 805-820	1.0	5.3

[1]See reference 15.

chronic ischemic heart disease was the foremost diagnosis for all hospitalized women 45 years of age and over, it constituted an increasingly higher proportion of all discharges with increasing age of the patient, ranging from about 3 percent for those 45-64 years of age to about 11 percent for those 85 years and over.

The spectrum of conditions diagnosed in hospitals becomes narrower as women age. The prominence of uniquely female problems such as malignant neoplasms of the breast and female genital organs, uterovaginal prolapse, uterine fibromyoma, and intermenstrual bleeding diminished after 64 years of age. Similarly, psychoses, alcoholism, ulcers, and disc and back problems declined in ranks after 64 years of age. For women 65 years of age and over, diagnoses of cataract, cerebrovascular disease, and fractures were more prominent than they were for younger women.

Table 6 shows the most frequent first-listed diagnoses for elderly women by racial groups. Race was not stated for about 13 percent of elderly women discharged, therefore, caution must be used in interpreting differences in diagnoses between the two racial groups white and black and all other, because these differences may be influenced by the distribution of those for whom race was not stated. Nevertheless, the data show that among elderly women for whom race was stated, chronic ischemic heart disease, cerebrovascular disease, cataract, pneumonia, congestive heart failure, and diabetes mellitus were among the 10 most frequent first-listed diagnoses for all racial groups. These 6 diagnoses, however, accounted for a greater proportion of discharges by black and all other women (32 percent) than they did for white women (25 percent). Other differences by race among elderly female discharges included the higher ranking of fractures for white women than for black and all other women. Fracture of neck of femur, for example, was ranked 5th among elderly white women and 18th among elderly black and all other women.

As previously mentioned, the incidence of fatal diseases is more common among elderly men than among elderly women. As table 7 shows, the discharge rates for elderly men exceeded those for elderly women for pneumonia, congestive heart failure, and acute myocardial infarction.

All-listed diagnoses.—Up to five diagnoses were coded from discharge records in 1978. In that year, an estimated 12.8 million diagnoses were recorded for the 4.8 million elderly women discharged from non-Federal short-stay hospitals. Older patients tended to have increasingly higher numbers of diagnoses. Table M shows that although 60 percent of middle-aged women had more than one diagnosis, the comparable proportions were 69 percent for those aged 65-74 years, 75 percent for those aged 75-84 years, and 78 percent for those aged 85 years and over.

Patient management

In hospitals, patient management includes diagnostic, therapeutic, nursing, and surgical procedures. In this section, patient management will be examined only for surgical procedures because of the limitations of the data collected in the NHDS.

In 1978, one or more surgical operations were performed for an estimated 1.5 million (30 percent) of the 4.8 million older women discharged from hospitals. In that year, a total of 2.1 million surgical operations, or an average of 1.4 surgical procedures per elderly women were recorded. Elderly women were more likely to have surgery than younger women were; the rate per 1,000 discharges with surgery for women aged 45-64 years was 86 compared with 104 for women aged 85 years and over (table N).

It is interesting to compare the percent of increase in rates for elderly women both with and without surgery. The rate of discharges for women

Table M. Number and percent distribution of women discharged from short-stay hospitals by number of diagnoses for each patient, according to age of patient: United States, 1978

Age	Total	Number of diagnoses				
		1	2	3	4	5
	Number of discharges in thousands					
45-64 years	4,403	1,774	1,174	713	388	354
65 years and over	4,832	1,317	1,176	942	651	747
65-74 years	2,305	715	576	427	276	311
75-84 years	1,804	445	425	371	263	300
85 years and over	723	157	175	144	112	136
	Percent distribution					
45-64 years	100.0	40.3	26.7	16.2	8.8	8.0
65 years and over	100.0	27.3	24.3	19.5	13.5	15.5
65-74 years	100.0	31.0	25.0	18.5	12.0	13.5
75-84 years	100.0	24.7	23.6	20.6	14.6	16.6
85 years and over	100.0	21.7	24.2	20.0	15.4	18.8

Table N. Number and rate of women discharged from short-stay hospitals, by surgery status and age of patient: United States, 1978

Age	Total	Number of discharges without surgery	Number of discharges with surgery	Rate of discharges without surgery	Rate of discharges with surgery
	Number of discharges in thousands			Rate per 1,000 population	
45-64 years	4,403	2,443	1,959	107.0	85.8
65-74 years	2,305	1,499	807	177.5	95.5
75-84 years	1,804	1,313	491	304.5	113.9
85 years and over	723	565	158	372.4	104.1

aged 85 years and over with surgery was 21 percent higher than that for women 45-64 years, but the comparable rates for women without surgery was almost 2½ times higher (table N). Thus as age increases hospitalization not involving surgery increases at a faster rate than hospitalization involving surgery does. This increase is probably due to several factors. As women get older, they are less able to undergo the rigors of surgery, they are more prone to diseases that are not amenable to surgery (e.g., cerebrovascular disease), and they are more likely to have return visits to a hospital for chronic conditions that do not involve surgery (e.g., chronic ischemic heart disease, congestive heart failure, and pneumonia).

When elderly women have operations, the procedures performed are different from those of middle-aged women. Table O shows that the rates per 10,000 women were higher for women aged 65 years and over than they were for those aged 45-64 years for ophthalmological survey (about 60 percent were extraction of lens), vascular and cardiac surgery, abdominal surgery, urological surgery, and orthopedic surgery. The greatest increase was in ophthalmological surgery, with a 200-percent increase from the age group 45-64 years and a 74-percent increase from the age group 65-74 years to those aged 75 years and over. Orthopedic surgery increased 70 percent from those 65-74 years of age to those 85 years of age and over. Except for neurosurgery, breast, and gynecological surgery, rates for the procedures listed in table O were higher for women aged 75 years and over than they were for those aged 65-74 years. Rates for gynecological surgery also dropped considerably after 64 years of age (from 366 to 166 to 102 per 10,000 women aged 45-64 years, 65-74 years, and 75 years and over, respectively). The less variable rate of breast surgery with increasing age is illustrated in figure 9 in the ambulatory care section.

The changing health problems of the elderly emerge from an examination of the operations performed proportionately most frequently. Specific surgical procedures are ranked by number and percent of all-listed operations for the four age groups in table 8. Biopsy accounted for a relatively large proportion of surgery for all age groups. For patients 65 years of age and over, certain procedures were

Table O. Rate of all-listed operations for women discharged from short-stay hospitals, by age of patient and selected surgical categories: United States, 1978

Surgical category and ICDA code[1]	Age		
	45-64 years	65-74 years	75 years and over
	Rate per 10,000 population		
Neurosurgery 01-05	34	33	23
Ophthalmology 06-14	54	169	294
Vascular and cardiac surgery ...24-30	71	116	138
Abdominal surgery 38-48	185	263	312
Urological surgery 54-61	55	68	85
Breast surgery 65	54	47	46
Gynecological surgery 67-72	366	166	102
Orthopedic surgery 80-90	176	228	387

[1]See reference 15.

pre-eminent regardless of the age group—among these were reduction of fracture, extraction of lens, and cholecystectomy. Gynecological procedures, such as dilation and curettage of the uterus, hysterectomy, and oophorectomy, which together accounted for 20 percent of the operations performed on women 45-64 years of age, were less prominent for those aged 65-84 years and were no longer among the top 62 percent of the procedures for women over age 84 years. Patients undergoing plastic repair of cystocele and rectocele or both were also likely to be under 75 years of age.

Among elderly female discharges, black and all other women (26 percent) were less likely than white women (30 percent) were to have surgery. Among operations most frequently performed on elderly women, biopsy and extraction of lens were the two most common procedures for both racial groups. Reduction of fracture with fixation, which was performed proportionally more often on elderly white females (7 percent) than on elderly black and all other females (3 percent), may account for this difference in surgery between racial groups (table 9).

Outcome

The outcome of care in hospitals is reflected in both the average length of stay and the discharge status.

Length of stay.—The average length of stay in the hospital for elderly women reflects both the severity

of the illness and the length of time needed by the elderly to recover from illness. In 1978, the average hospital stay for elderly women 75-84 years of age (11.3 days) was considerably longer than that for middle-aged women 45-64 years of age (8.5 days). Among women in the age groups 65 years and over (65-74 years, 75-84 years, and 85 years and over), the average length of stay continued to increase but not as dramatically, differing only by a day or less than a day in each successive age group (figure 16). Examination of the length of stay by first-listed diagnosis shows a similar pattern of increasing length of stay with increasing age for women with first-listed diagnoses such as malignant neoplasms of the uterus and female genital organs, diabetes mellitus, chronic ischemic heart disease, congestive heart failure, and fractures (table P).

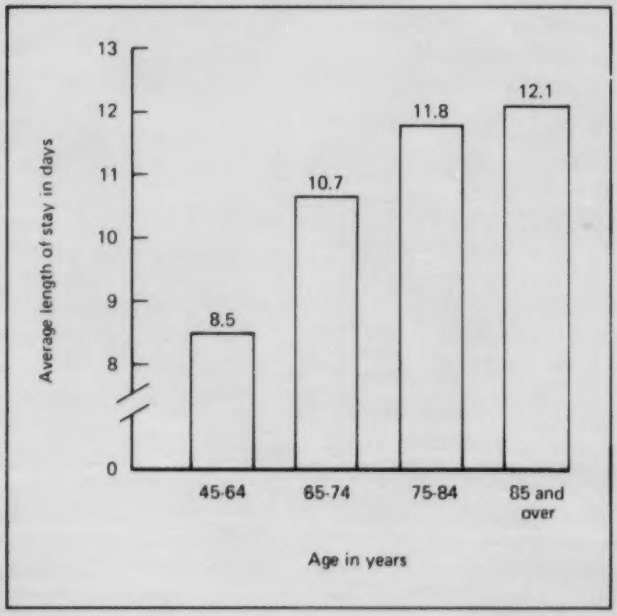


Figure 16. Average length of stay of women 65 years of age and over discharged from short-stay hospitals, by age: United States, 1978

Whether or not the elderly woman had an operation also affected the length of stay in the hospital because surgery, compounded by the patient's age, lengthened the amount of time needed to recover. Table Q shows that the average length of stay for women with surgery increased from 12.2 days for those aged 65-74 years to 16.1 days for those aged 85 years and over. In contrast, the average length of stay for elderly women without surgery was similar for the three age groups 65 years and over (table Q).

The average length of stay for the 20 most frequent surgical procedures performed on elderly women discharged is presented in table 10.

Living arrangements also affect the length of stay in hospitals for elderly women. Because older women are more likely than older men are to live alone, they may depend on the hospital to provide care for a longer period following an illness. The average length of stay for single elderly women was 13.2 days compared with 10.4 days for elderly married women (table R). Among elderly women, the average length of stay was longer for elderly black and all other women (13.3 days) than for elderly white women (11.2 days) (figure 17).

Discharge status and mortality.—During 1978, patients 65 years of age and over accounted for 70 percent of the 868,700 deaths in hospitals, and women accounted for 49 percent of the deaths of elderly patients in hospitals. Although deaths occurring in hospitals were largely among the elderly, the majority of elderly women (and men) discharged from the hospitals were alive. In 1978, 88 percent of elderly women discharged were alive at the time of

Table P. Average length of stay of women discharged from short-stay hospitals, by age of patient and selected first-listed diagnoses: United States, 1978

First-listed diagnosis and ICDA code[1]	Age				
	15-44 years	45-64 years	65-74 years	75-84 years	85 years and over
	Average length of stay in days				
Malignant neoplasms:					
All forms . . . 140-209	9.2	12.3	13.7	15.0	12.9
Breast . . . 174, 199.2	9.2	10.5	11.6	13.5	11.3
Uterus and female genital organs . . . 180-184, 199.3, 199.4	6.1	9.6	11.5	12.5	12.7
Diabetes mellitus . . . 250	6.4	10.4	11.3	13.3	14.0
Cataract . . . 374	3.2	4.5	4.4	4.3	4.5
Chronic ischemic heart disease . . . 412	6.5	8.9	9.8	11.2	12.2
Congestive heart failure . . . 427.0	*	9.6	10.5	11.3	11.8
Cerebrovascular disease . . . 430-438	10.9	14.6	15.0	14.3	12.8
Pneumonia, all forms . . . 480-486	7.2	9.0	10.0	12.6	12.5
Osteoarthritis, other arthritis, rheumatism, and allied conditions . . . 710-718	7.0	9.4	13.8	13.3	11.6
Fractures, all sites . . . 800-829	7.4	10.7	13.9	17.6	18.7

[1] See reference 15.

discharge; only 6 percent were discharged dead. For 6 percent of elderly female discharges, however, the discharge status was not stated on the face sheet of the medical record. Thus the percent of elderly women discharged dead is only a conservative estimate of the mortality in hospitals. In addition, the percent of deaths occurring in hospitals relative to the number of persons hospitalized is understated because multiple live discharges due to readmissions can occur, but deaths in hospitals occur only once. Nevertheless, the proportion of discharges who died (or hospital fatality rate (HFR)) does suggest different mortality patterns in hospitals for the elderly.

As expected, the HFR for women increased with age. The HFR rose from 2 percent for women aged 45-64 years to 11 percent for women aged 85 years and over. The HFR for men exceeded that for women in all of the age categories over 45 years (table S).

Figure 18 indicates that among elderly women discharged, the HFR was greater for black and all other women (8 percent) than for white women (6

Table Q. Average length of stay of women 65 years of age and over discharged from short-stay hospitals, by surgery status and age of patient: United States, 1978

Age	*Hospital discharges with surgery*	*Hospital discharges without surgery*
	Average length of stay in days	
65 years and over	13.3	10.5
65-74 years	12.2	9.8
75-84 years	14.2	10.9
85 years and over	16.1	11.0

Table R. Average length of stay of women 65 years of age and over discharged from short-stay hospitals, by marital status: United States, 1978

Marital status	*Average length of stay in days*
Married	10.4
Single	13.2
Widowed	11.7
Divorced or separated	10.5
Not stated	10.3

Table S. Hospital fatality rates of patients discharged from short-stay hospitals by sex and age of patient: United States, 1978

Age	*Sex*	
	Female	*Male*
	Hospital fatality rate[1]	
45-64 years	2.1	2.7
65-74 years	4.3	6.4
75-84 years	6.9	9.2
85 years and over	10.7	12.8

[1] $\left(\frac{\text{Number of deaths}}{\text{Total number of patients discharged}}\right) \times 100.$

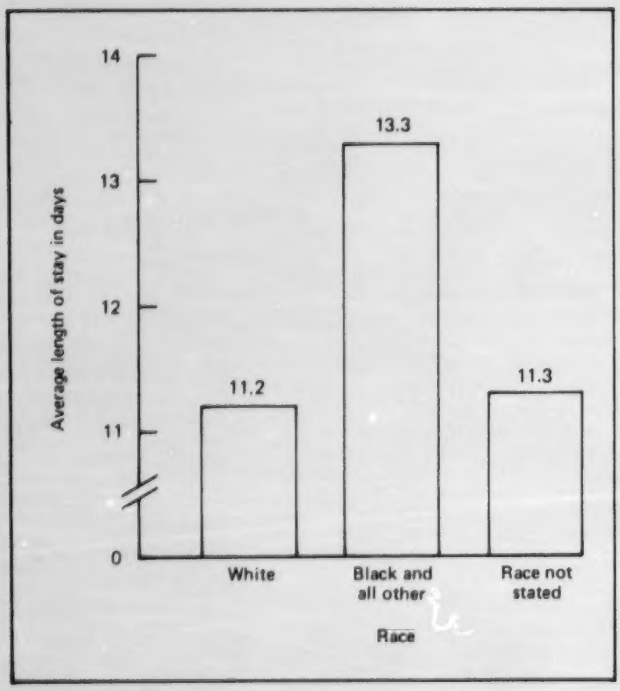


Figure 17. Average length of stay of women 65 years of age and over discharged from short-stay hospitals, by race: United States, 1978

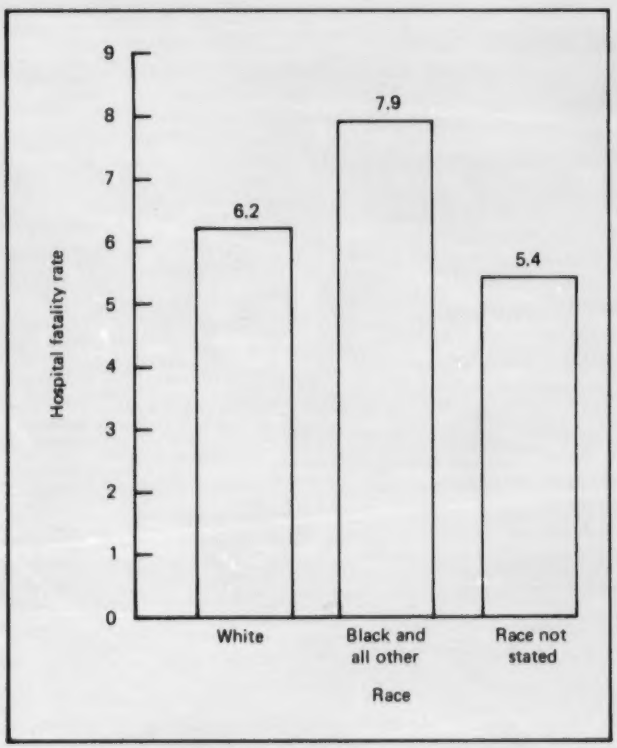


Figure 18. Hospital fatality rate for women 65 years of age and over discharged from short-stay hospitals, by race: United States, 1978

percent). This difference may indicate that the conditions for which elderly black and all other women enter hospitals are more serious and are perhaps at later stages of illness than they are for white women. Deaths in hospitals were more likely for elderly women with diagnoses in the ICDA diagnostic categories of neoplasms (12 percent), infective and parasitic diseases (11 percent), diseases of the circulatory system (11 percent), and diseases of the respiratory system (7 percent). In contrast, the HFR was much lower for elderly women with mental disorders (2 percent), symptoms and ill-defined conditions (4 percent); and accidents, poisonings, and violence (2 percent) (table 11).

Surgery was performed on 30 percent of the elderly women and only 4 percent died among them. For elderly women with surgery, the HFR was greatest for those who had vascular and cardiac surgery (13 percent), thoracic surgery (9 percent), neurosurgery (7 percent), abdominal surgery (6 percent), and otorhinolaryngology (6 percent) (table 12).

Discharge status and location.—In 1978, 4.2 million (or 88 percent) elderly women were known to have been discharged alive. Table T shows that the majority (76 percent) were routinely discharged to their homes. The next most likely location of discharge was to another facility or organization (11 percent). Because of the age range of these women it may be assumed that this other facility was a nursing home or similar institution. Although the estimate of 507,000 elderly women placed in nursing homes from short-stay hospitals was likely to be an overestimation (because the exact type of facility was unknown), it indicates the hospitals' role in the placement of elderly women in nursing homes. Data from the resident sample of the 1977 NNHS show that 832,000 elderly female residents were in nursing homes during the survey and that hospitals were the second most likely location from which nursing home residents were placed.[23] (A private residence was the most likely location from which residents entered nursing homes.)

Table T also shows that a larger proportion of elderly women (11 percent) than elderly men (7 percent) were transferred to another facility for continued care. The greater use of nursing homes by elderly women is discussed in the section entitled "Nursing home care."

Table T. Number and percent distribution of patients 65 years of age and over discharged from short-stay hospitals, by sex of patient and discharge status: United States, 1978

Sex and discharge status	*Number of discharges in thousands*	*Percent distribution*
Female		
All discharge statuses	4,833	100.0
Routine discharge to home	3,662	75.8
Left against medical advice	12	0.2
Transferred to another facility or organization	507	10.5
Referred to organized homecare service	76	1.6
Died	301	6.2
Not stated	275	5.7
Male		
All discharge statuses	3,875	100.0
Routine discharge to home	3,009	77.6
Left against medical advice	19	0.5
Transferred to another facility or organization	288	7.4
Referred to organized homecare service	37	1.0
Died	310	8.0
Not stated	212	5.5

Nursing home care

Patient characteristics

In 1977, elderly women were twice as likely as elderly men to reside in nursing homes (figure 19). Although use of nursing homes increased with advancing age for both sexes, women used nursing homes at significantly higher rates than men did regardless of the age group. This pattern of use was especially true in the oldest age group where 1 in 4 women 85 years of age and over resided in nursing homes compared with 1 in 7 men of the same age. A longer life expectancy and a greater tendency among persons without spouses to enter nursing homes reflect this greater utilization by elderly women.[23,24] Because about half (52 percent) of civilian noninstitutionalized women 65 years of age and over were widowed (compared with 14 percent of men of the same age), they faced this problem to a greater extent than men did.

The marital status distribution of nursing home residents also reflects this pattern of use. In 1977, 78 percent of elderly female nursing home residents were widowed compared with only 46 percent of elderly[23] male residents.

In 1977, white women were more likely to reside in nursing homes than black and all other women were. The rate of nursing home use by elderly white women (62 per 1,000 population) was about 72 percent greater than that for elderly women of black and all other races (36 per 1,000 population) (figure 20). This lower use is not only due to the shorter life span of black and all other women (71 years compared with 77 years for white women),[24] but also may be due to the greater substitution of informal home care for formal nursing home care. Because elderly black women are more likely to maintain an extended family household, informal home care is also more likely to be available to them. Moreover, elderly persons of Asian and Pacific Islands ethnicity have traditionally been cared for in the home.[25] In addition, the shortage of beds funded by Medicaid may result in the lower use of nursing homes by black and all other elderly women.[26] Medicaid is a joint Federal-State program providing medical benefits to low income groups. Because elderly black women are more likely to have low incomes, their use of Medicaid as a source of payment for nursing home care is greater than that of elderly white women. In 1977, a greater proportion of black than white residents relied on Medicaid as their primary source of payment for care.[23]

Nursing home utilization was examined in the preceding discussion by using cross-sectional data on nursing home residents collected from the 1977 NNHS. In addition to the resident sample, the 1977 NNHS also included a sample of all discharges (alive and dead) from nursing homes during the 1976 calendar year. Data on discharges were collected by interviewing the nurse most familiar with the relevant medical records. In the remainder of this section, only data from the discharge sample will be examined because it allows examination of completed length of stay and outcome of care for persons discharged from nursing homes. Demographically, the characteristics of persons discharged from nursing homes are similar to those of residents currently residing in the nursing home. The average age of all elderly women discharged from nursing homes in 1976 was 82 years and about 78 percent of all elderly discharged women were widowed (table U). Data on race or ethnicity, however, were not collected in the discharge survey and thus will not be included in further discussions.

In 1976, 640,900 elderly women were discharged (both alive and dead) from nursing homes. As in the resident sample, the use of nursing homes by elderly women in 1976 (47 discharges per 1,000 population) was greater than that by elderly men (36 discharges per 1,000 population). However, the nursing home utilization rate for elderly women as measured by the discharge survey (47 discharges per 1,000 population) was not as high as that measured by the resident survey (60 residents per 1,000 population); the

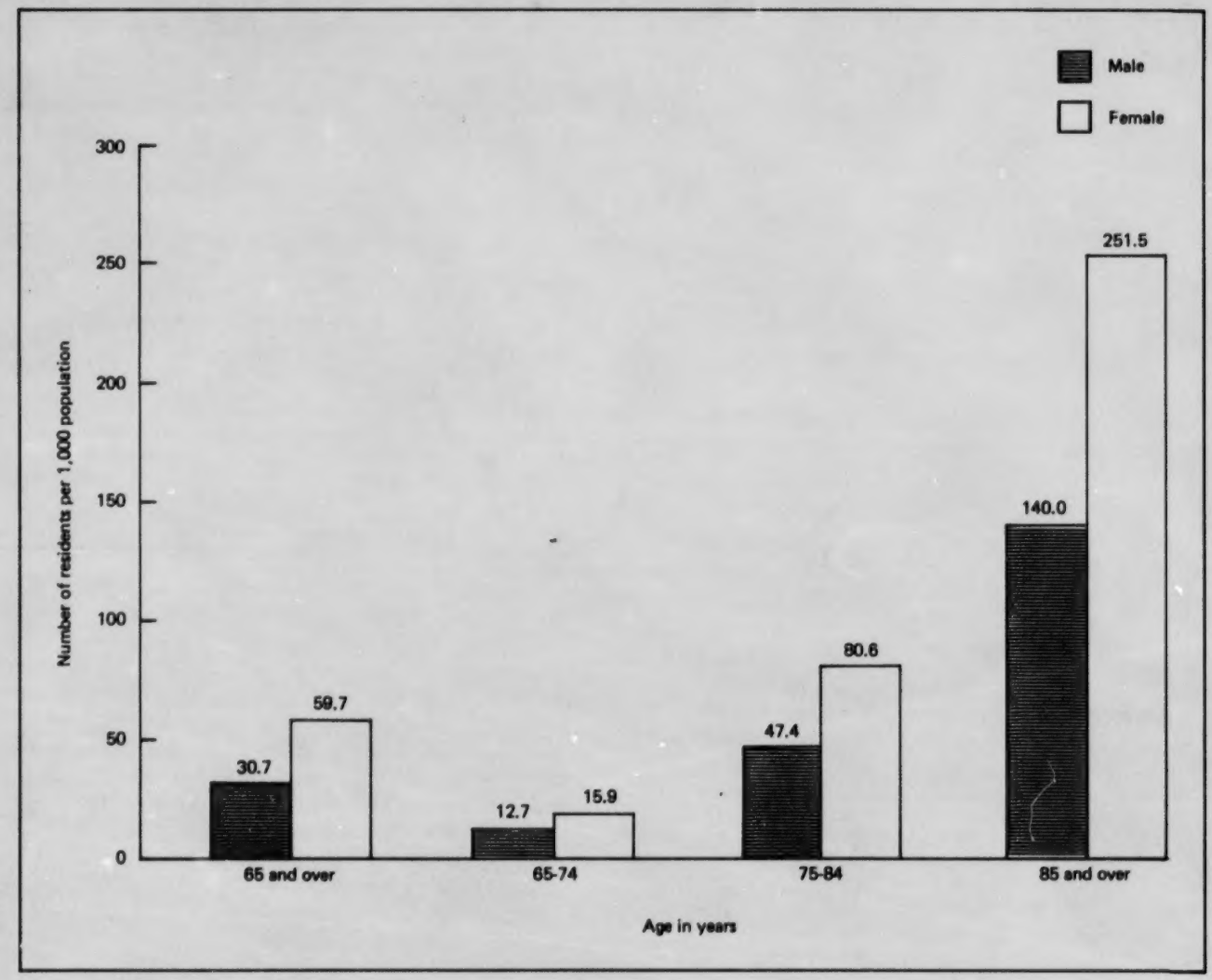


Figure 19. Number of nursing home residents per 1,000 population 65 years of age and over, by sex and age: United States, 1977

reverse was true for the utilization rate for elderly men (36 discharges per 1,000 population compared with 31 residents per 1,000 population). These differences in utilization rates illustrate the differences in the populations measured by the two surveys. The resident survey was more heavily weighted with long-term residents in nursing homes because of the methodology with which all persons on the facility roster were sampled on the night before the survey. In contrast, the discharge sample was more likely to include short-term residents of nursing homes than the resident sample because all discharges from the nursing home during a calendar year were sampled.[27] Thus the previously discussed differences in utilization rates by sex seem to imply that elderly women were more likely to use nursing homes on a long-term basis than elderly men who were more likely to use nursing homes for relatively shorter stays.

Patient condition

Primary diagnosis at admission.—Diagnosis is commonly used by physicians as a basis for defining and organizing patient care services. As collected in the discharge survey, diagnosis was the one condition among those listed on the medical record that appeared to cause the patients to need nursing home care at the time of admission. In cases where the primary condition was unknown, the first-listed diagnosis was considered primary. In 1976, about 48 percent of discharged women were admitted to nursing homes with a diagnosis related to diseases of the circulatory system; frequently, these diseases were arteriosclerosis (21 percent) or stroke (12 percent). Another 9 percent were admitted with mental disorders or senility without psychosis, while 42 percent were admitted because of other diagnoses (table 13).

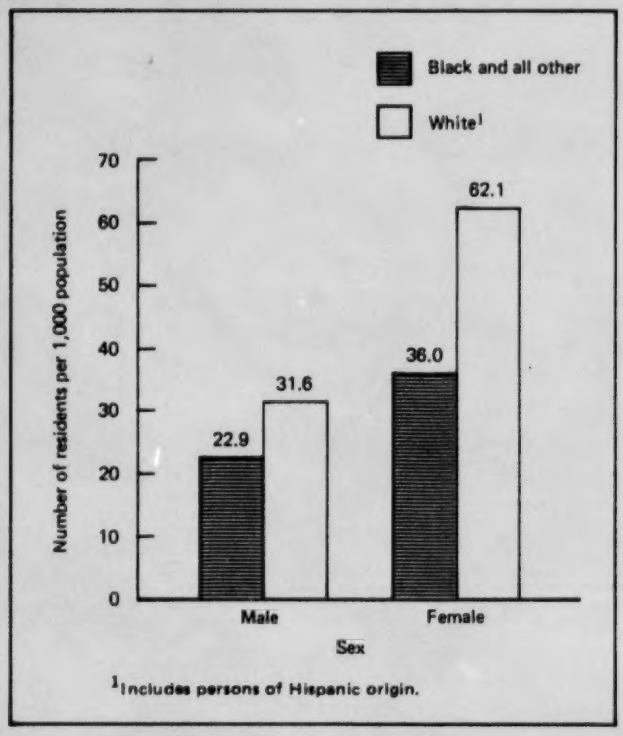


Figure 20. Number of nursing home residents per 1,000 population 65 years of age and over, by race and sex: United States, 1977

Table U. Percent distribution of women 65 years of age and over discharged from nursing homes, by age and marital status: United States, 1976

Age and marital status	*Percent distribution*
Age	
All ages, 65 years and over	100.0
65-74 years	16.4
75-84 years	46.4
85 years and over	37.2
Marital status	
All marital statuses	100.0
Married	11.4
Widowed[1]	77.8
Divorced or separated	2.7
Never married	8.1

[1]Includes a small number with unknown marital status.

Among women 65-74 years of age, the most frequent category of primary diagnosis at admission was stroke, followed by arteriosclerosis, fractures, neoplasms, diabetes, and chronic brain syndrome. For women 75-84 years of age, arteriosclerosis was the most frequent category and stroke was next, followed by fractures, neoplasms, heart attack and ischemic heart disease, and congestive heart failure. The leading diagnosis for women 85 years of age and over was arteriosclerosis, followed by fractures, stroke, congestive heart failure, arthritis and rheumatism, and chronic brain syndrome.

Primary diagnosis: comparison with hospitals.—Certain conditions among the elderly may precipitate hospitalization that ultimately leads to a nursing home stay for either recuperative or other long-term care. The diagnoses for elderly women discharged from hospitals and nursing homes suggests such a link. Of the 10 leading diagnoses for elderly women discharged from short-stay hospitals and from nursing homes, five were common both in hospitals and nursing homes. These diagnoses were malignant neoplasms, fractures, cerebrovascular disease, congestive heart failure, and diabetes (table W). These diagnoses except for congestive heart failure, were also found in a study of Medicare episodes of illnesses to be associated with relatively high utilization of post-hospital care (in skilled nursing homes and home health agencies).[28] This study also found that persons who used post-hospital care were more likely to be female and older than persons who used hospital care only. Table W also shows that, as expected, heart attack and ischemic heart disease were diagnoses that were more likely to be treated in hospitals than in nursing homes. Arteriosclerosis, however, was much more likely to be a diagnosis in a nursing home than in a hospital.

Chronic conditions or impairments.—Data on the chronic conditions or impairments of discharged women reflect both the primary diagnosis at admission and other coexisting diagnoses listed on the medical record. In 1976, most discharged women had multiple chronic conditions. About 73 percent had a chronic condition involving diseases of the circulatory system, 39 percent had a chronic mental disorder or senility without psychosis, and 73 percent had other chronic conditions (data not shown).

Table W. Percent of women 65 years of age and over discharged from short-stay hospitals and from nursing homes, by selected diagnoses: United States, 1978 and 1976

Diagnosis and ICDA code[1]	*Hospital discharges*[2]	*Nursing home discharges*[3]
	Percent	
Malignant neoplasms 140-209	8.3	6.2
Diabetes mellitus 250	2.8	4.1
Psychoses 290-299	1.1	2.2
Hypertensive disease 400-404	1.6	2.2
Heart attack, chronic ischemic heart disease 410, 412	10.4	4.1
Congestive heart failure 427.0	2.9	6.1
Cerebrovascular disease 430-438	5.6	11.6
Arteriosclerosis 440	0.7	21.0
Fractures, all sites 800-829	6.3	12.4
Fracture of neck of femur 820	2.8	9.7
All other sites . . . 800-819, 821-829	3.5	2.7

[1]See reference 15.
[2]Data from the 1978 National Hospital Discharge Survey.
[3]Data are for 1976.

Because of the greater age of women discharged from nursing homes as compared with their noninstitutionalized counterparts and perhaps of the selection factors at the time of admission to nursing homes, elderly women discharged from nursing homes had a greater prevalence of chronic conditions than elderly noninstitutionalized women had. Chronic conditions most prevalent among discharged elderly women were arteriosclerosis (47 percent), heart trouble (38 percent), senility (24 percent), chronic brain syndrome (20 percent), stroke (20 percent), arthritis and rheumatism (18 percent), and hypertension (17 percent). Only 3 percent of discharged elderly women reported no chronic conditions or impairments. In contrast, the conditions most common among noninstitutionalized elderly women were arthritis (52 percent), hypertension (30 percent), visual impairments (23 percent), hearing impairments (26 percent) and diabetes (9 percent) (tables 14 and 1).

The prevalence of chronic conditions among elderly discharges showed patterns by sex similar to those found in the civilian noninstitutionalized population. Discharged elderly women had higher rates of arteriosclerosis, hypertension, senility, arthritis and rheumatism, cataracts, hip fractures and other bone fractures than their male counterparts had. Discharged elderly men had higher rates of stroke, missing arms, legs, or extremities, cancer, chronic respiratory disease, and kidney trouble than women had (table 14).

Differences were found in diagnoses commonly present (chronic conditions or impairments) among discharged elderly women versus their admitting diagnosis. In general, at admission a high correlation exists between extant diagnoses (chronic conditions) and the admitting diagnosis when diseases of the circulatory system, hip fractures, and cancer are involved. About two-thirds of those with these conditions were admitted to the nursing home with the same primary diagnosis (table 15). Other chronic conditions such as senility, chronic brain syndrome, arthritis and rheumatism, and diabetes tended to be a coexisting condition rather than a primary reason for admission to a nursing home. For example, only 28 percent of discharged women with chronic diabetes were admitted with that condition as a primary diagnosis. Similarly, only 27 percent and 18 percent of discharged women with chronic brain syndrome and senility, respectively, had an admitting diagnosis involving mental disorders and senility without psychosis.

Functional limitations.—Discharged women suffered from functional limitation as a result of these many conditions. About half of the discharged elderly women were incontinent (48 percent) or were either chairfast or bedfast (49 percent). Although about half (47 percent) of the discharged women could walk (with or without assistance), mechanical aids commonly were used to perform this activity; 25 percent used a wheelchair, 15 percent used a cane, 30 percent used a walker, and 3 percent used crutches or braces for assistance in walking (table Y). About 59 percent of the discharged women used eyeglasses, which was another indication of the visual impairments prevalent among elderly women. The actual level of impairment (with or without glasses) was not available in the medical records of discharges.

In general, the prevalence of chronic conditions and functional impairments previously mentioned increased with age (table 16). The proportion of discharged elderly women with arteriosclerosis, heart disease, chronic brain syndrome, and hip fractures increased with age (figure 21), as did the proportions of those who were incontinent or chairfast or bedfast (figure 22), and of those who used eyeglasses, a wheelchair, or a walker (figure 23). The prevalence of cancer among elderly women in long-term care facilities, however, decreased with age probably because patients with cancer were likely to be terminal in nursing homes.

Patient management

As in hospitals, patient management in nursing homes is multidisciplinary, involving nursing care services, physician services, therapy services, and dietary services. Because of the older population in nursing homes and the greater rates of chronic illness, the care received in nursing homes is largely continuing or maintenance. Nursing homes also provided a substantial volume of restorative care to convalescing patients.

Table Y. Percent distribution of women 65 years of age and over discharged from nursing homes, by selected functional statuses: United States, 1976

Functional status	*Percent distribution*
Mobility	
Total	100.0
Walks, with or without assistance	46.6
Mechanical assistance:[1]	
Wheelchair	25.0
Cane	15.1
Walker	30.4
Crutches or braces	2.7
Chairfast	27.0
Bedfast	21.8
Unknown	4.5
Continence	
Total	100.0
No difficulty controlling bowels and bladder	48.6
Difficulty controlling bowels	2.6
Difficulty controlling bladder	6.4
Difficulty controlling both bowels and bladder	28.6
Ostomy in either bowels or bladder	10.1
Unknown as to both bowels and bladder	3.8

[1] Patient may have used more than 1 special aid or device.

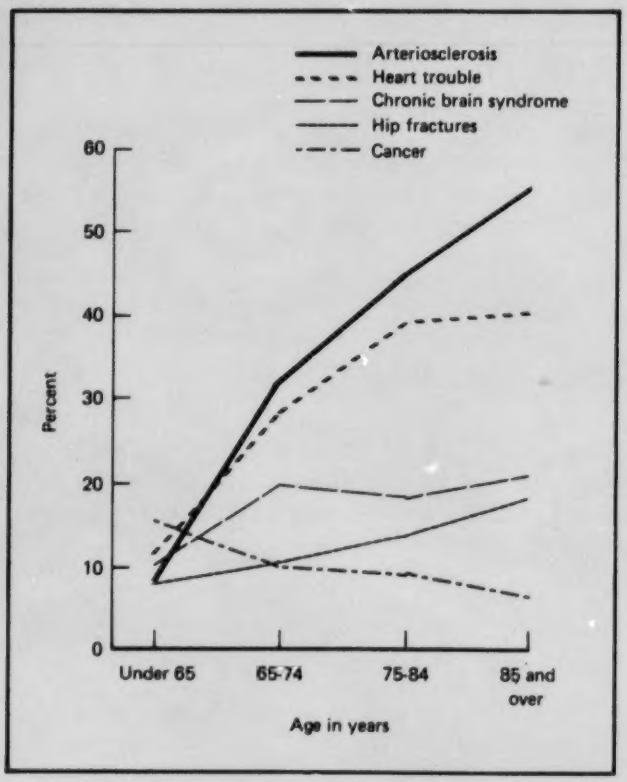


Figure 21. Percent of women discharged from nursing homes, by selected chronic conditions and impairments, by age: United States, 1976

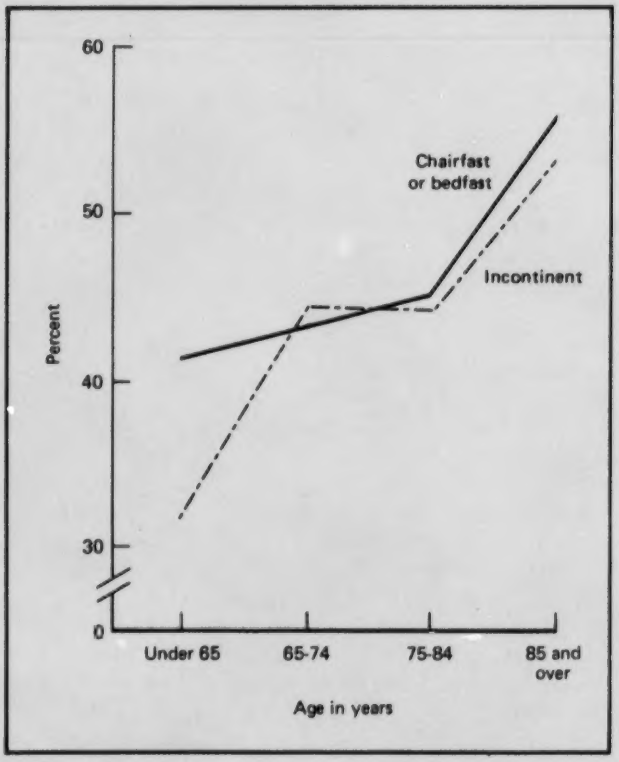


Figure 22. Percent of women 65 years of age and over discharged from nursing homes who were chairfast or bedfast, or incontinent, by age: United States, 1976

Level of nursing care.—Data collected on the level of nursing care services received by discharged elderly women within the 7 days prior to discharge revealed that about 3 out of 5 discharges (58 percent) had received intensive nursing care services, defined as one or more of the following: bowel or bladder retraining, catheterization, full bed bath, intravenous injections, or oxygen therapy. About a third (33 percent) received other nursing care such as application of sterile dressing or bandages; blood pressure reading; enema; hypodermic injections; irrigation; and checking temperature, pulse, and respiration. Only about 9 percent received personal care services (i.e., the administration of medications prescribed by a physician, a rub or massage, or a special diet) or more of the services previously listed (table 17).

Intensive nursing care services were received more often by persons severely limited in mobility and continence. A greater proportion of women who were chairfast or bedfast received intensive nursing care (73 and 87 percent, respectively) than those who walked (40 percent) (figure 24). Similarly, a greater proportion of women who had difficulty controlling bladder only (63 percent), controlling both bowels and bladder (82 percent) or who had an ostomy in either bowels or bladder (88 percent) received intensive nursing care compared with 41 percent of women who had no difficulty controlling both bowels and bladder.

Physician services.—The receipt of nursing care services was also accompanied by more frequent physician visits and increased services received at the most recent visit. Fifty-two percent of women who received nursing care in the last week also saw a physician at that time compared with 25 percent who did not receive nursing care services. The location of the physician visit is not known for the *discharge* sample. However, for the resident sample, 83 percent were seen by a physician inside the facility.[23] Eighty-two percent of women who received nursing care services also received an examination at the last physician visit compared with 51 percent of women not receiving nursing care services. The proportion of discharged women who received treatment or had lab tests arranged increased with the level of nursing care received. Women who received intensive nursing care services were twice as likely as others were to receive a prescription or refill at the last physician visit (table 17).

Special diet.—Nursing care services were also coordinated with the receipt of a special diet. The proportion of discharged women who received a special diet was greater for those receiving nursing care services. Forty-eight percent of women who

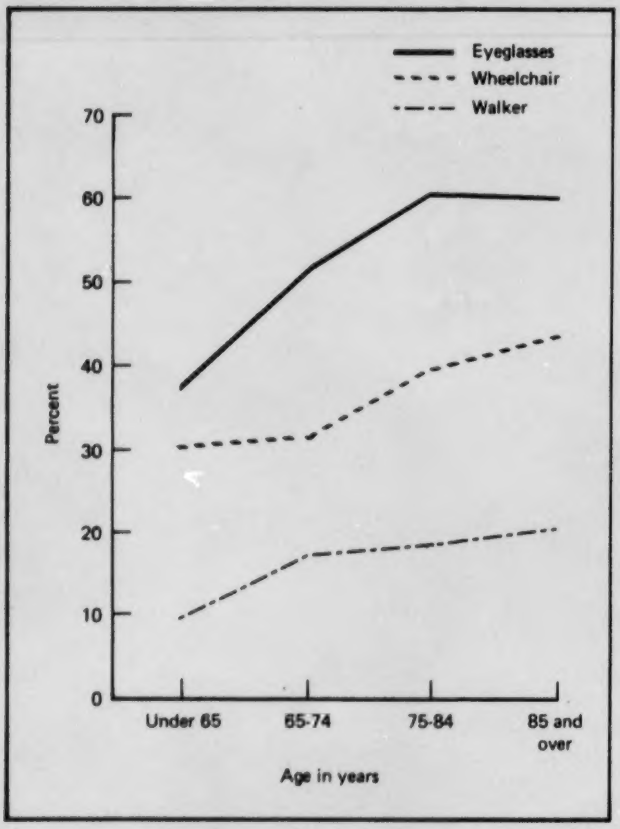


Figure 23. Percent of women 65 years of age and over discharged from nursing homes who used eyeglasses, wheelchair, or walker, by age: United States, 1976

received intensive nursing care and 41 percent of those who received other nursing care were given a special diet compared with 20 percent of women who did not receive nursing care.

Outcome

As in hospitals, outcome is discussed by length of stay and discharge status.

Length of stay.—The length of stay in nursing homes reflects the long-term nature of the care received in the institution as well as the age and severity of the illness presented by the patient. In 1976, the average length of stay for discharged elderly women was 401 days (or 1.1 years). As in hospitals, the age of the discharged women was associated with longer stays—a reflection of the increasingly serious problems associated with aging. Elderly women, on the average, had longer stays (401 days) than their male counterparts had (293 days) (table Z).

Examination of the length of stay by primary diagnosis at admission also showed a shorter stay for women with diagnoses of cancer (185 days) and certain bone fractures (126 days) (table 18). Diagnoses for which the average length of stay figure was unreliable and for other diseases of the circulatory system, hip fractures, diseases of the respiratory system, and other or unknown diagnoses were exceptions to this finding. The average length of stay for women with mental disorders and senility without psychosis (761 days) was longer than that for women admitted with a diagnosis involving diseases of the circulatory system (424 days).

Longer stays were also associated with several conditions that increased with age. For example, of the elderly women who were discharged within 1 month of admission, 43 percent were bedfast or chairfast; however, of those who were discharged after at least a 6-month stay, 55 percent were bedfast or chairfast (figure 25). Similarly, the proportion of women who were incontinent, senile, or had chronic brain syndrome increased with the increasing length of stay in the facility (figures 25 and 26). This increase may indicate that the underlying causes of these conditions do not improve with the length of time spent in the nursing home. It may also indicate that elderly women who are incontinent, senile, or have a chronic brain syndrome may be held in the nursing home because of the condition.

In contrast to hospital care where the length of stay is related to short-term curative care, the length of stay in nursing homes is largely related to the long-term custodial care provided. In some cases, nursing homes provide short-term recuperative post-hospital services. However, even for those receiving post-hospital care, the type of care may change. Research has shown that the 6-month length of stay can be critical for patients recovering in nursing homes.[29] The proportion of discharged women who received physical therapy during the last month was one indicator of the change from rehabilitative to custodial care. Figure 27 shows that the proportion of elderly women who received physical therapy after 6 months (12 percent) was lower than the comparable proportions among elderly women who were in the facility from 1 month to less than 6 months (24-33 percent), respectively. While physical therapy services received in nursing homes tended to decrease with length of stay, the likelihood that custodial services will be received increased with the length of stay. For example, the proportion of elderly women who received intensive nursing care services increased with the length of stay (figure 28).

As in hospitals, the length of stay for an elderly woman in a nursing home is shortened if she has a spouse or other family member to provide care in her home. In 1976, the average length of stay was shortest for discharged elderly women who were married (219 days). In contrast, figure 29 indicates that the average lengths of stay were considerably longer for discharged elderly women who were widowed (411 days), divorced or separated (438 days), or never married (554 days).

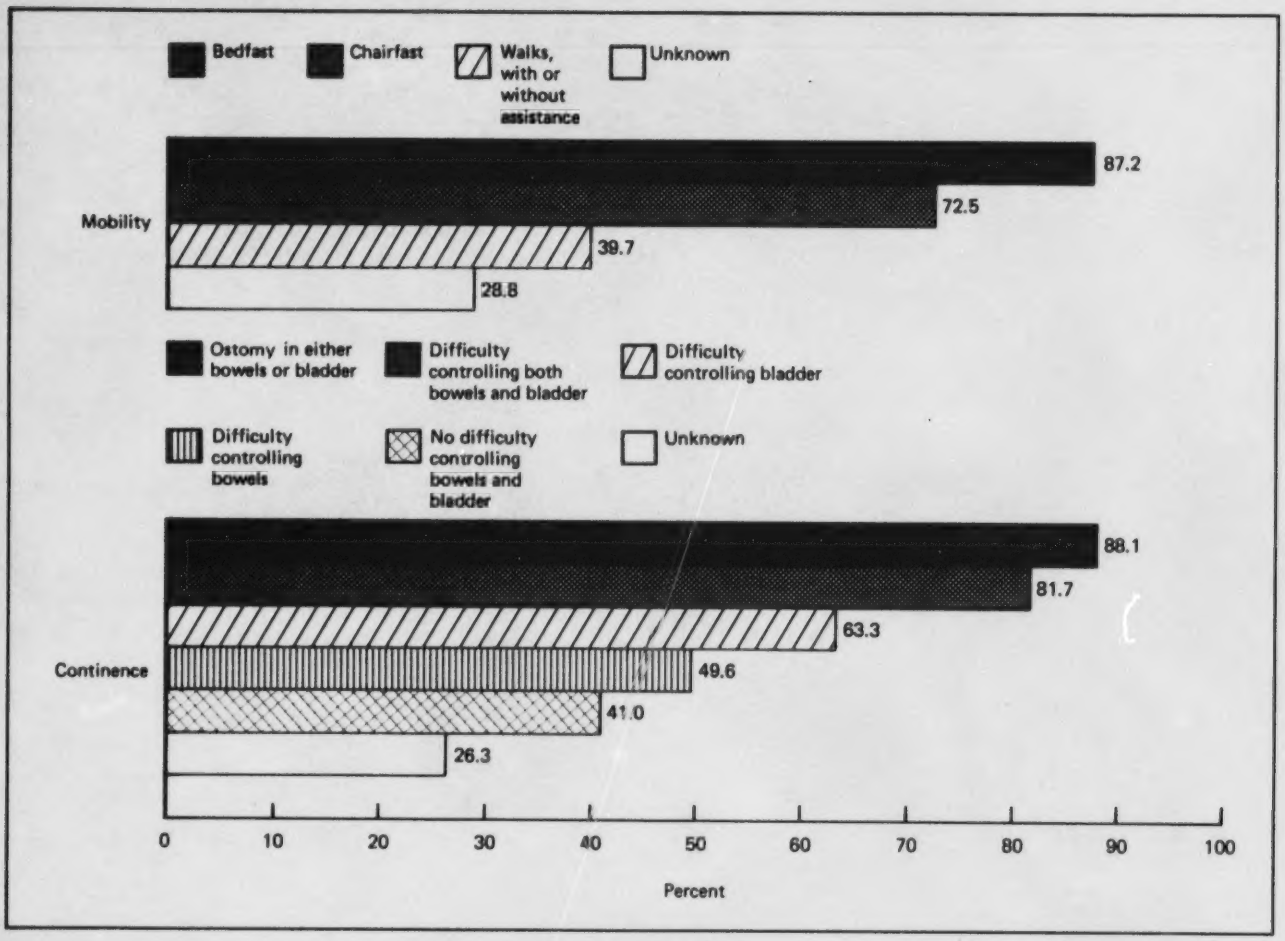


Figure 24. Percent distribution of women 65 years of age and over discharged from nursing homes who received intensive nursing care, by mobility and continence status: United States, 1976

Table Z. Average length of stay of patients 65 years of age and over discharged from nursing homes, by sex, age, and marital status: United States, 1976

Age and marital status	Sex	
	Female	Male
	Average length of stay in days	
All discharges	401	293
Age		
65-74 years	262	190
75-84 years	335	290
85 years and over	544	408
Marital status		
Married	219	146
Widowed[1]	411	375
Divorced or separated	438	399
Never married	554	492

[1] Includes a small number with unknown marital status.

Discharge status.—In 1976, 72 percent of elderly women were discharged alive; 28 percent were discharged dead. As expected, elderly women who were discharged dead were older, on the average (84 years of age), than elderly women discharged alive (81 years of age). Longer stays were also characteristic of women discharged dead; the average length of stay for elderly women discharged dead was 644 days compared with 305 days for elderly women discharged alive. This difference in length of stay by discharge status increased sharply with increasing age (table AA), and also held for all primary diagnoses at admission with the exception of cancer (table 18).

Among discharged elderly women, certain conditions appear to be associated with a greater likelihood that they will be discharged dead. For example, elderly women admitted to the nursing home because of cancer were more likely than others were to be discharged dead. About 52 percent of elderly women with a primary diagnosis of cancer were discharged

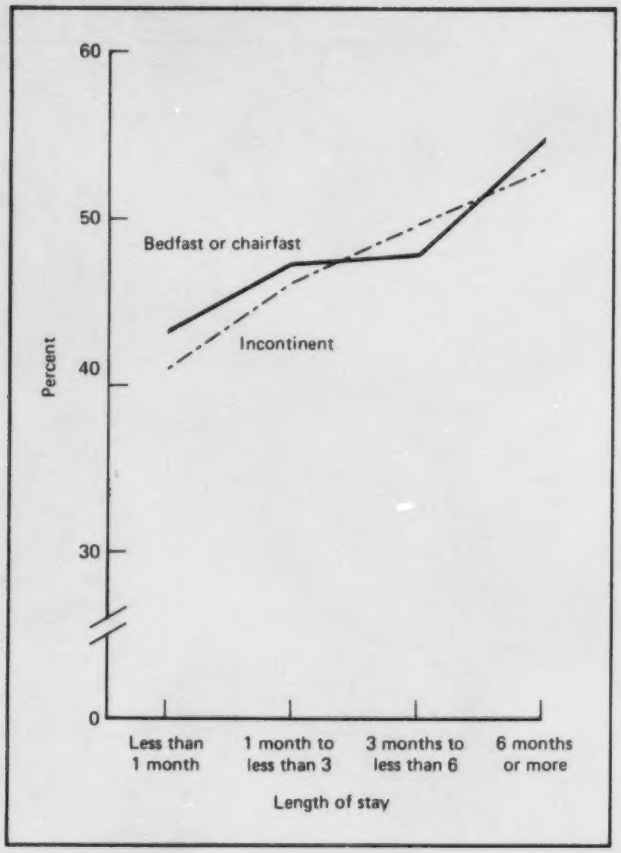


Figure 25. Percent of women 65 years of age and over discharged from nursing homes who were incontinent and bedfast or chairfast, by length of stay: United States, 1976

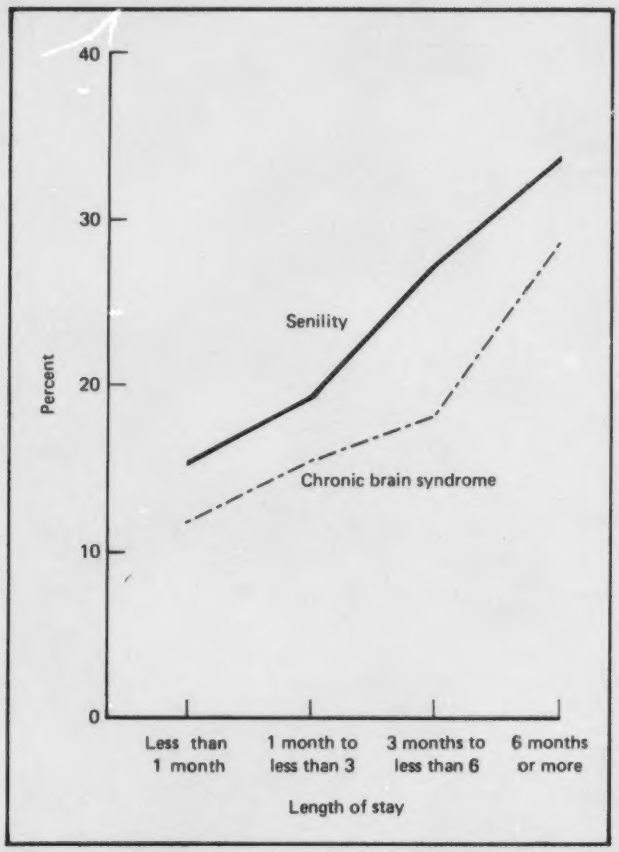


Figure 26. Percent of women 65 years of age and over discharged from nursing homes with chronic conditions of senility and chronic brain syndrome, by length of stay: United States, 1976

dead compared with 18 percent of women admitted with a hip fracture and 28 percent of women admitted with heart attack or ischemic heart disease (table 19).

In addition, the proportion of elderly women discharged dead increased from 11 percent for those who walked (with or without assistance) to 61 percent of those who were bedfast. Thus the chances of a discharge because of death for bedfast women was about 5½ times greater than that for those who could walk. Similarly, women who were incontinent of both bowels and bladder (50 percent) or had an ostomy in either bowels or bladder (47 percent) were 5 times more likely to be discharged dead than women who were continent (11 percent) (table 19).

The majority of discharges from nursing homes, however, were alive rather than dead. In 1976, 459,000 elderly women were discharged from nursing homes alive. Most of the elderly women were discharged to another health facility for continued care (43 percent). Usually this other health facility was a short-stay hospital (32 percent); about 9 percent of elderly women were discharged to another nursing home. About 26 percent of elderly women returned to their homes or to a semiprivate residence such as a boarding or retirement home. The average stay for elderly women returning to a private or semiprivate residence (105 days) was shorter than that for those transferred to another health facility (426 days) (table BB).

Elderly women discharged from nursing homes to short-stay hospitals were transferred for acute care and sometimes for terminal care. Of the 203,100 elderly women discharged to a hospital, 22 percent were known to have died in the hospital. The comparable proportion among those transferred to another nursing home, in contrast, was 9 percent.

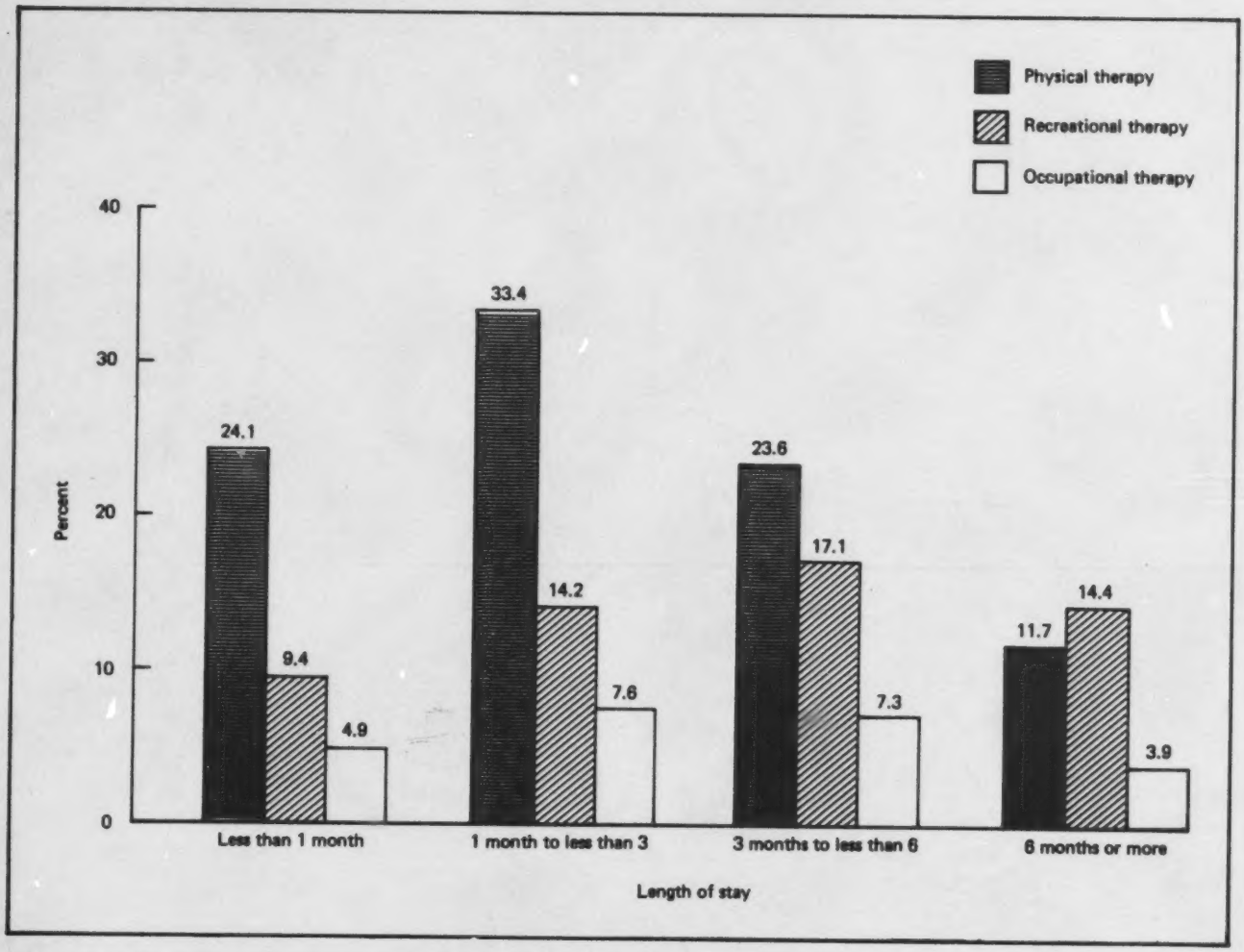


Figure 27. Percent of women 65 years of age and over discharged from nursing homes, by type of therapy received, by length of stay: United States, 1976

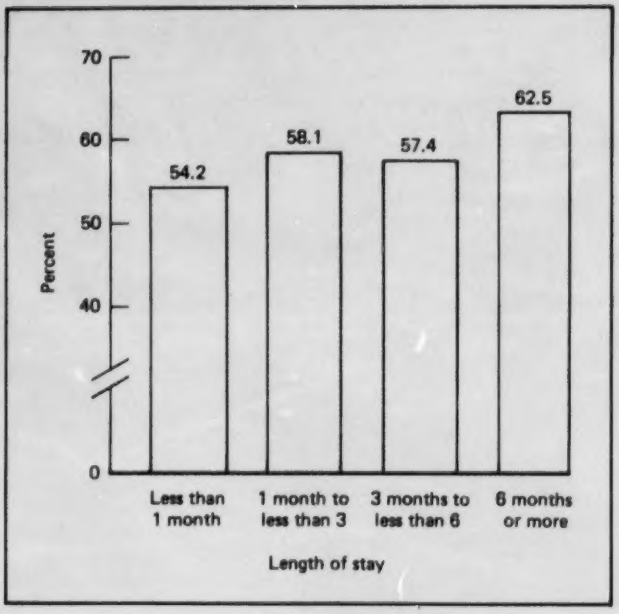


Figure 28. Percent of women 65 years of age and over discharged from nursing homes who received intensive nursing care, by length of stay: United States, 1976

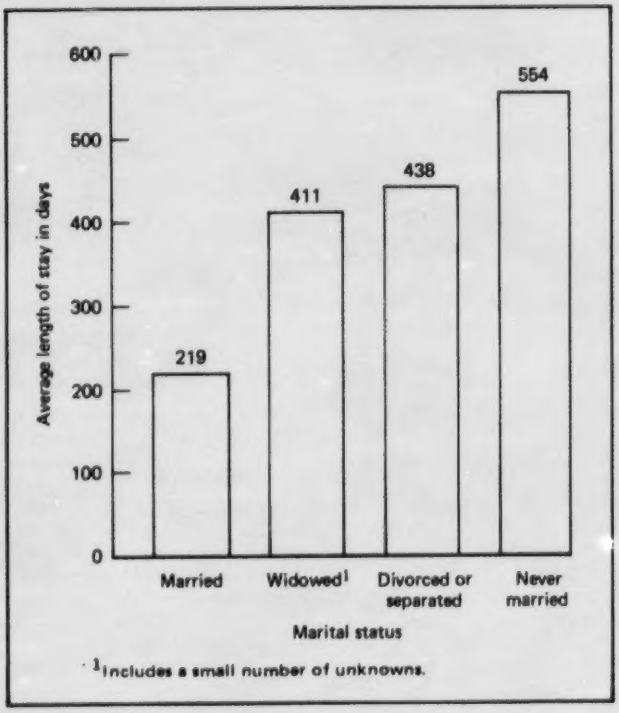


Figure 29. Average length of stay of women 65 years of age and over discharged from nursing homes, by marital status: United States, 1976

Table AA. Average age by discharge status and average length of stay of women 65 years of age and over discharged from nursing homes, by discharge status and age of patient: United States, 1976

Age	Discharge status		
	Total[1]	Alive	Dead
	Average age in years		
All women, 65 years and over	82	81	84
	Average length of stay in days		
65 years and over	401	305	644
65-74 years	262	250	310
75-84 years	335	277	511
85 years and over	544	375	850

[1]Includes a small number with unknown discharge status.

Table 88. Number, percent distribution, and average length of stay of women 65 years of age and over discharged from nursing homes, by living arrangement after discharge: United States, 1976

Living arrangement after discharge	*Number of discharges*	*Percent distribution*	*Average length of stay in days*
All arrangements	640,900	100.0	401
Private or semiprivate residence	164,400	25.6	105
Another health facility	277,800	43.3	426
Another nursing home	60,100	9.4	411
General or short-stay hospital	203,100	31.7	445
Mental hospital	*	*	*
Other health facility or unknown	11,500	1.8	*
Unknown or other arrangement	16,800	2.6	260
Died or discharge status unknown	182,000	28.4	644

Discussion

This report has examined health care resource utilization by elderly women beginning with ambulatory care in physicians' offices through hospital care to nursing home care. Because the units of measurement were patient events (office visits or discharges from hospitals and nursing homes), rather than unduplicated patient counts, rates of use do not permit tracing movement of people among these three health care settings. Nevertheless, these rates do point to the general course of treatment sought by the older women. Ambulatory care in physicians' offices, for example, is the most likely care sought by older women. The visit rate to physicians' offices was 421 visits per 100 population in 1978. In contrast, there were 34 discharges from short-stay hospitals per 100 population of women 65 years of age and over in 1978 and there were 5 discharges from nursing homes per 100 population of women 65 years of age and over in 1976.

Implicit in this report's findings is the progression of the severity of illness as women age and the relationship between these illnesses and the type of care provided in each setting or institution. Treatment in a physician's office was most likely to be for chronic conditions such as hypertensive disease, diabetes, and osteoarthritis and allied conditions that require monitoring but are not necessarily life threatening. Use of short-stay hospitals, on the other hand, was generally for episodes of illness requiring acute medical care (such as chronic ischemic heart disease, congestive heart failure, cerebrovascular disease, and pneumonia) or surgical intervention (such as malignant neoplasms, fractures, and gastrointestinal conditions). Use of nursing homes was for conditions such as arteriosclerosis, senility, and chronic brain syndrome, which require constant nursing care services and monitoring. Transfers between nursing homes and hospitals, however, appear to be frequent for diagnoses of fractures, malignant neoplasms, cerebrovascular disease, and diabetes.

This report has also examined differences in utilization patterns of the three major health care settings by elderly men and women. Elderly men appear to have a higher degree of morbidity because they enter hospitals more often and use more hospital resources. Elderly men, however, have proportionately fewer visits to physicians' offices and thus may also seek less preventive care than elderly women. This factor may relate to the higher morbidity of men.

Among the elderly, a hospital stay may be followed by a stay in a nursing home. This pattern, however, applies more often to elderly women than it does to elderly men. Post-hospital care in the home would appear to be more available to elderly men because elderly men are more likely to have a spouse. The lower likelihood that elderly women would receive informal care in the home (either post hospital or as a substitute for long-term care), along with the older woman's longer life expectancy, may lead to their greater utilization of nursing homes by elderly women than by elderly men.

Among elderly women, the utilization of the three health settings varied by race. Black and all other women made proportionately fewer visits to physicians' offices, were discharged from short-stay hospitals less often, and were residents of nursing homes less often than elderly white women were. However, black and all other women had longer lengths of stay and were more likely to be discharged dead from short-stay hospitals than white women were. These patterns of use may result partially from the tendency of black and women of all other races to delay treatment until later stages of illness as well as from problems of accessibility to services.

This report has explored the utilization of only three sources of health care for elderly women. Patterns of use in other settings may differ from those described in this report. Examples of other health care settings are hospital outpatient departments, hospital emergency rooms, community health centers, and mental hospitals.

References

[1]U.S. Bureau of the Census: Social and economic characteristics of the older population: 1978. *Current Population Reports*, Series P-23, No. 85. Washington. U.S. Government Printing Office, Aug. 1979.

[2]Rice, D.: Long life to you. *Amer. Demogr.*, Vol. 1, No. 9, 9-15. Oct. 1979.

[3]Social Security Administration: Income and resources of the aged. SSA Pub. No. 13-11727. Washington. U.S. Government Printing Office, Jan. 1980.

[4]National Center for Health Statistics: Characteristics of persons with hypertension: United States, 1974, by A. Moss and G. Scott. *Vital and Health Statistics*, Series 10-No. 121. DHEW Pub. No. (PHS) 79-1549. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1978.

[5]National Institutes of Health: Diabetes data. DHEW Pub. No. (NIH) 78-1468. Public Health Service. Washington. U.S. Government Printing Office, 1978.

[6]National Center for Health Statistics: Prevalence of selected chronic respiratory conditions: United States, 1970, by C. Wilder. *Vital and Health Statistics*, Series 10-No. 84. DHEW Pub. No. (HRA) 74-1511. Health Resources Administration. Washington. U.S. Government Printing Office, Sept. 1973.

[7]National Center for Health Statistics: Prevalence of chronic circulatory conditions: United States, 1972, by C. Wilder. *Vital and Health Statistics*, Series 10-No. 94. DHEW Pub. No. (HRA) 75-1521. Health Resources Administration. Washington. U.S. Government Printing Office, Sept. 1974.

[8]National Center for Health Statistics: Prevalence of chronic conditions of the genitourinary, nervous, endocrine, metabolic, and blood and blood-forming systems and of other selected chronic conditions: United States, 1973, by G. Scott. *Vital and Health Statistics*, Series 10-No. 109. DHEW Pub. No. (HRA) 77-1536. Health Resources Administration. Washington. U.S. Government Printing Office, Mar. 1977.

[9]National Center for Health Statistics: Prevalence of selected chronic digestive conditions: United States, 1975, by T. Drury and L. Howie. *Vital and Health Statistics*, Series 10-No. 123. DHEW Pub. No. (PHS) 79-1588. Public Health Service. Washington. U.S. Government Printing Office, July 1979.

[10]National Center for Health Statistics: Prevalence of chronic skin and musculoskeletal conditions: United States, 1976, by G. Bonham. *Vital and Health Statistics*, Series 10-No. 124. DHEW Pub. No. (PHS) 79-1552. Public Health Service. Washington. U.S. Government Printing Office, Nov. 1978.

[11]National Center for Health Statistics: Prevalence of selected impairments: United States, 1977, by B. Feller. *Vital and Health Statistics*, Series 10-No. 134. DHHS Pub. No. (PHS) 81-1562. Public Health Service. Washington. U.S. Government Printing Office, Feb. 1981.

[12]National Institutes of Health: Cancer Incidence and Mortality in the United States, 1973-76. DHEW Pub. No. (NIH) 78-1837.

[13]Moore E.C.: Women and health: United States, 1980. *Public Health Rep.*, Suppl. to September-October 1980. pp. 80-81.

[14]National Center for Health Statistics: Acute conditions, incidence and associated disability: United States, July 1977-June 1978, by P. Ries. *Vital and Health Statistics*, Series 10-No. 132. DHEW Pub. No. (PHS) 79-1560. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1979.

[15]National Center for Health Statistics: *Eighth Revision International Classification of Diseases, Adapted for Use in the United States.* PHS Pub. No. 1693. Public Health Service. Washington. U.S. Government Printing Office, 1967.

[16]National Center for Health Statistics: Office visits by women, by B. Cypress. *Vital and Health Statistics*, Series 13-No. 45. DHEW Pub. No. (PHS) 80-1796. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1980.

[17]National Center for Health Statistics: Utilization of short-stay hospitals, annual summary for the United States, 1978, by B. Haupt. *Vital and Health Statistics*, Series 13-No. 46. DHEW Pub. No. (PHS) 80-1797. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1980.

[18]National Center for Health Statistics: The National Nursing Home Survey: 1977 summary for the United States, by J. Van Nostrand, A. Zappolo, E. Hing, B. Bloom, B. Hirsch, and D. Foley. *Vital and Health Statistics*, Series 13-No. 43. DHEW Pub. No. (PHS) 79-1794. Public Health Service. Washington. U.S. Government Printing Office, July 1979.

[19]National Center for Health Statistics: Physician visits: Volume and interval since last visit: United States, 1975, by A. Gentile. *Vital and Health Statistics*, Series 10-No. 128. DHEW Pub. No. (PHS) 79-1556. Public Health Service. Washington. U.S. Government Printing Office, Apr. 1979.

[20]National Center for Health Statistics: Use of selected medical procedures associated with preventive care: United States, 1973, by A. J. Moss and M. H. Wilder. *Vital and Health Statistics*, Series 10-No. 110. DHEW Pub. No. (HRA) 77-1538. Health Resources Administration. Washington. U.S. Government Printing Office, Mar. 1977.

[21]Gonella, J. S., Louis, D. Z., and McCord, J. J.: The staging concept, an approach to the assessment of outcome of ambulatory care. *Medical Care.* 14:13-21, 1976.

[22]Office of Health Resources Opportunity: Health status of minorities and low-income groups, by M. H. Rudov and N. Santangelo. DHEW Pub. No. (HRA) 79-627. Health Resources Administration. Washington. U.S. Government Printing Office, 1979.

[23]National Center for Health Statistics: Characteristics of nursing home residents, health status and care received, National Nursing Home Survey, May-December 1977, by E. Hing. *Vital and Health Statistics,* Series 13-No. 51. DHHS Pub. No. (PHS) 81-1712. Public Health Service. Washington. U.S. Government Printing Office, Apr. 1981.

[24]National Center for Health Statistics: Final mortality statistics, 1978. *Monthly Vital Statistics Report.* Vol. 29, No. 6, Suppl. (2). DHHS Pub. No. (PHS) 80-1120. Public Health Service. Hyattsville, Md. Sept. 17, 1980.

[25]Special Committee on Aging, United States Senate, 1972. Trends in Long-Term Care (Part 20—Access of Minority Groups to Nursing Homes). Washington. U.S. Government Printing Office. Aug. 10, 1972. pp. 2458-2475.

[26]Scanlon, W., Difederisco, E., and Stassen, M.: Long-term care: Current experience and a framework for analysis. The Urban Institute. Washington. 1979. pp. 26-33.

[27]National Center for Health Statistics: A comparison of nursing home residents and discharges from the 1977 National Nursing Home Survey: United States, by E. Hing and A. Zappolo. *Advance Data from Vital and Health Statistics,* No. 29. DHEW Pub. No. (PHS) 78-1250. Public Health Service. Hyattsville, Md. May 17, 1978.

[28]Young, K. and Fisher, C.: Medicare episodes of illness: A study of hospital, skilled nursing facility, and home health agency care. *Health Care Fin. Rev.* Fall 1980. pp. 1-23.

[29]Katz, S., Heiple, K. G., Downs, T., Ford, A. B. and Scott, C. P.: Long term course of 147 patients with fracture of the hip. *Surgery, Gynecology and Obstetrics.* Vol. 124, pp. 1219-1230, June 1967.

List of detailed tables

1. Prevalence rates per 1,000 population of selected chronic conditions and impairments for noninstitutionalized women, by age of patient: United States, 1978 39
2. Number and percent distribution of office visits made by women by principal diagnostic category, according to age of patient: United States, 1978. 40
3. Number, percent distribution, and cumulative percent of office visits made by women 65 years of age and over, by most frequent principal diagnoses: United States, 1978 40
4. Percent of office visits made by women, by age of patient and diagnostic and therapeutic services ordered or provided: United States, 1978 41
5. Number and percent distribution of women discharged from short-stay hospitals, by age of patient and selected most frequent first-listed diagnoses: United States, 1978 42
6. Number and percent distribution of women 65 years of age and over discharged from short-stay hospitals, by race of patient and selected most frequent first-listed diagnoses: United States, 1978 43
7. Number and rate of patients 65 years of age and over discharged from short-stay hospitals, by sex of patient and 25 selected most frequent first-listed diagnoses: United States, 1978 44
8. Number and percent distribution of selected most frequent all-listed surgical procedures for women discharged from short-stay hospitals, by age of patient: United States, 1978 . . . 45
9. Number and percent distribution of selected most frequent all-listed surgical procedures for women 65 years of age and over discharged from short-stay hospitals, by race of patient: United States, 1978 46
10. Average length of stay of women 65 years of age and over discharged from short-stay hospitals, by 20 selected most frequent surgical procedures: United States, 1978 47
11. Hospital fatality rate of women 65 years of age and over discharged from short-stay hospitals, by first-listed diagnostic category: United States, 1978 47
12. Number and hospital fatality rate of women 65 years of age and over discharged from short-stay hospitals, by discharge status and surgical category: United States, 1978 48
13. Percent distribution of women 65 years of age and over discharged from nursing homes by primary diagnosis at admission, according to age of patient: United States, 1976 49
14. Number and rate per 1,000 patients 65 years of age and over discharged from nursing homes, by sex of patient and chronic condition and impairment: United States, 1976 50
15. Percent distribution of women 65 years of age and over discharged from nursing homes by selected primary diagnoses at admission, according to selected chronic conditions and impairments: United States, 1976 51
16. Number and rate per 1,000 women discharged from nursing homes, by age of patient and chronic condition and impairment: United States, 1976 52
17. Number and percent distribution of women 65 years of age and over discharged from nursing homes by selected health services received, according to level of care and length of stay: United States, 1976 53
18. Average length of stay of women 65 years of age and over discharged from nursing homes, by discharge status and primary diagnosis at admission: United States, 1976 54
19. Percent distribution of women 65 years of age and over discharged from nursing homes by discharge status, according to selected health statuses: United States, 1976 54

Table 1. Prevalence rates per 1,000 population of selected chronic conditions and impairments for noninstitutionalized women, by age of patient: United States, 1978

Chronic condition and impairment and ICDA code[1]	Age		
	17-44 years	45-64 years	65 years and over
	Rate per 1,000 population		
Circulatory conditions			
Heart conditions . . . 390-398, 402, 404, 410-429, 782.1	40.5	105.5	190.4
Hypertensive heart disease . . . 402, 404	4.9	38.5	45.0
Coronary heart disease . . . 410-414	*	28.4	78.8
Hypertensive disease, N.E.C. . . . 400, 401, 403	58.6	198.3	302.1
Cerebrovascular disease . . . 430-438	*	10.8	34.6
Varicose veins . . . 454, 456	41.8	84.0	97.4
Digestive conditions			
Ulcer of stomach and duodenum . . . 531-534	15.5	29.0	23.5
Frequent constipation . . . 564.0	18.7	37.3	74.9
Hernia of abdominal cavity . . . 550-553	5.5	42.5	49.8
Functional and symptomatic upper gastrointestinal disorder[2] . . . 536, 784.0, 784.1, 784.3, 784.7, 785.4 pt	16.5	26.0	49.2
Gallbladder condition[3] . . . 574, 575, 576.0, 576.1, 576.9	8.0	17.7	29.5
Gastritis and duodenitis . . . 535	7.8	14.0	17.4
Diverticula of intestine . . . 562	1.7	21.0	40.7
Chronic enteritis and ulcerative colitis . . . 563	7.0	16.8	18.2
Intestinal condition[2,4] . . . 564.1, 564.9, 785.4 pt	8.6	15.5	20.4
Genitourinary, nervous, endocrine, metabolic and blood-forming systems, and other selected conditions			
All thyroid conditions . . . 240, 241, 242.0, 242.1, 243-246	20.4	50.7	41.8
Diabetes . . . 250	10.7	59.4	93.9
All anemia conditions . . . 280, 281, 282-284, 285.0, 285.8, 285.9	23.4	23.9	35.1
Migraine . . . 346	49.7	45.2	18.1
All diseases of the urinary system . . . 580-584, 590, 591, 592, 593, 595-599	41.1	42.9	70.8
All female troubles except breast . . . 612-625, 626-629	34.0	21.8	8.2
Impairments			
Visual impairments . . . X00-X05	18.9	60.3	231.0
Hearing impairments . . . X06-X09	33.3	97.8	259.1
Orthopedic impairments (except paralysis or absence):			
Back or spine . . . X70-X72, X80-X81	51.5	69.5	84.6
Upper extremity and shoulder . . . X73, X74, X86-X88	4.8	16.0	29.7
Lower extremity and hip . . . X75-X77, X82-X85	22.6	38.3	70.9
Other multiple, N.E.C. of limb, back, and trunk . . . X78, X79, X89	5.0	11.6	16.8
Respiratory conditions			
Chronic bronchitis . . . 490, 491	30.5	41.3	55.2
Emphysema . . . 492	*	11.1	20.2
Chronic sinusitis . . . 503	136.0	150.3	134.0
Skin and musculoskeletal conditions			
Neoplasms of the skin . . . 172-173, 216, 232.2	3.2	5.6	21.7
Corns and callosities . . . 700	15.9	55.4	69.0
Diseases of nail . . . 703	16.9	35.3	61.7
Arthritis, N.E.C. . . . 710-715	54.3	304.0	522.1

[1] For coding of chronic conditions, see reference 15. For coding of impairments, see reference 11.
[2] Gas (pains) in stomach was coded to ICDA code 536; in intestines, to ICDA code 564.
[3] Includes gallbladder trouble, N.O.S.
[4] Includes intestinal or bowel trouble, N.O.S.

NOTE: N.E.C. = not elsewhere classified; N.O.S. = not otherwise specified.

SOURCE: Unpublished data from the 1978 National Health Interview Survey. These data are based on a 1/6 subsample of households. Estimates below 215,000 are considered statistically unreliable.

Table 2. Number and percent distribution of office visits made by women by principal diagnostic category, according to age of patient: United States, 1978

Principal diagnostic category and ICDA code[1]		Age		
		45-64 years	65-74 years	75 years and over
		Number of visits in thousands		
All visits		83,996	35,258	20,971
		Percent distribution		
Total		100.0	100.0	100.0
Infective and parasitic diseases	000-136	2.3	1.5	1.4
Neoplasms	140-239	4.5	5.1	3.9
Endocrine, nutritional, and metabolic diseases	240-279	7.3	6.5	4.4
Mental disorders	290-315	4.7	3.1	1.7
Diseases of the nervous system and sense organs	320-389	8.8	11.8	14.7
Diseases of the circulatory system	390-458	12.7	24.1	30.4
Diseases of the respiratory system	460-519	10.9	8.2	5.8
Diseases of the digestive system	520-577	4.7	3.8	3.6
Diseases of the genitourinary system	580-629	8.4	4.7	3.1
Diseases of the skin and subcutaneous tissue	680-709	5.2	4.4	4.3
Diseases of the musculoskeletal system and connective tissue	710-738	8.9	9.5	10.0
Symptoms and ill-defined conditions	780-796	5.1	4.8	4.8
Accidents, poisonings, and violence	800-999	6.3	5.0	4.9
Special conditions and examinations without sickness	Y00-Y13	6.9	4.1	2.6
All other[2]	residual	3.4	3.4	4.5

[1] See reference 15.
[2] Includes 280-289, diseases of the blood and blood-forming organs; blank diagnosis; noncodable diagnosis; and illegible diagnosis.

Table 3. Number, percent distribution, and cumulative percent of office visits made by women 65 years of age and over, by most frequent principal diagnoses: United States, 1978

Principal diagnosis and ICDA code[1]		Number of visits in thousands	Percent distribution	Cumulative percent
All diagnoses		56,230	100.0	100.3
Essential benign hypertension	401	6,160	11.0	11.0
Chronic ischemic heart disease	412	3,428	6.1	17.1
Diabetes mellitus	250	2,224	4.0	21.1
Osteoarthritis and allied conditions	713	1,870	3.3	24.4
Cataract	374	1,684	3.0	27.4
Arthritis, unspecified	715	1,192	2.1	29.5
Medical or special examination	Y00	1,024	1.8	31.3
Symptomatic heart disease	427	1,003	1.8	33.1
Other diseases of eye	378	967	1.7	34.8
Glaucoma	375	897	1.6	36.4
Neuroses	300	851	1.5	37.9
Refractive errors	370	728	1.3	39.2
Medical and surgical aftercare	Y10	705	1.3	40.5
Synovitis, bursitis, and tenosynovitis	731	630	1.1	41.6
Acute upper respiratory infection of multiple or unspecified sites	465	629	1.1	42.7
Malignant neoplasm of breast	174	602	1.1	43.8
Other hypertrophic and atrophic conditions of skin	701	556	1.0	44.8
Bronchitis, unqualified	490	553	1.0	45.8
Rheumatoid arthritis and allied conditions	712	493	0.9	46.7
Cystitis	595	484	0.9	47.6
Other eczema and dermatitis	692	466	0.8	48.4
Angina pectoris	413	462	0.8	49.2
Acute but ill-defined cerebrovascular disease	436	446	0.8	50.0
Other diseases of respiratory system	519	442	0.8	50.8
Other and unspecified anemias	285	438	0.8	51.6
Arteriosclerosis	440	379	0.7	52.3
Other diseases of retina and optic nerve	377	370	0.7	53.0
Other malignant neoplasm of skin	173	363	0.7	53.7
All other	residual	26,184	46.6	100.3

[1] See reference 15.

Table 4. Percent of office visits made by women, by age of patient and diagnostic and therapeutic services ordered or provided: United States, 1978

Diagnostic and therapeutic services	Age			
	All ages	45-64 years	65-74 years	75 years and over
	Number of visits in thousands			
All visits	349,244	83,996	35,258	20,971
Diagnostic services	Percent[1]			
None	8.7	10.2	6.0	3.8
Limited examination	61.6	60.6	64.6	66.5
General examination	21.3	19.2	17.9	18.6
Pap test	8.1	8.2	4.8	2.2
Clinical lab test	22.7	19.2	23.0	21.6
X-ray	7.0	9.6	9.1	9.2
EKG	2.7	4.4	6.3	5.6
Vision test	4.6	5.1	7.6	9.2
Endoscopy	1.0	1.1	1.4	*1.2
Blood pressure check	37.5	41.5	48.8	51.1
Other	4.1	4.5	4.9	4.6
Therapeutic services				
None	20.0	17.6	17.4	15.8
Immunization or desensitization	7.2	5.7	5.5	4.7
Drugs (prescription or nonprescription)	52.6	57.3	62.5	62.9
Diet counseling	8.2	8.5	8.9	5.2
Family planning	2.2	*0.4	-	-
Medical counseling	19.8	19.9	20.9	23.4
Physiotherapy	3.2	4.5	3.7	2.8
Office surgery	6.7	6.2	5.8	7.0
Psychotherapy or therapeutic listening	5.5	5.9	4.7	3.5
Other	2.4	3.3	3.3	3.7

[1] Percents will not add to 100.0 because more than 1 service may have been rendered during a visit.

Table 5. Number and percent distribution of women discharged from short-stay hospitals, by age of patient and selected most frequent first-listed diagnoses: United States, 1978

Age, first-listed diagnosis, and ICDA code[1]	Number of discharges in thousands	Percent distribution
45-64 years		
All discharges	4,403	100.0
Chronic ischemic heart disease 412	151	3.4
Diabetes mellitus 250	125	2.8
Cholelithiasis 574	114	2.6
Malignant neoplasm of breast 174, 199.2	109	2.5
Uterine fibromyoma and other benign neoplasms of uterus 218, 219	85	1.9
Pneumonia, all forms 480-486	81	1.8
Malignant neoplasm of uterus and other female genital organs 180-184, 199.3, 199.4	78	1.8
Psychoses 290-299	75	1.7
Hypertensive disease 400-404	72	1.6
Uterovaginal prolapse 623	72	1.6
Cerebrovascular disease 430-438	71	1.6
Displacement of intervertebral disc 725	70	1.6
Diseases of breast 610-611	70	1.6
Intermenstrual bleeding 626.6	66	1.5
Osteoarthritis and allied conditions 713	60	1.4
Ulcer of stomach; ulcer of duodenum; peptic ulcer, site unspecified; and gastrojejunal ulcer 531-534	59	1.3
Other hernia of abdominal cavity 551-553	58	1.3
Benign neoplasm of other and unspecified organs and tissues and neoplasms of unspecified nature 210-217, 222-233, 234.1-239	49	1.1
Sprains and strains of back (including neck) 846-847	48	1.1
Alcoholism 303	48	1.1
Acute myocardial infarction 410	45	1.0
Gastritis and duodenitis 535	43	1.0
Other diseases of uterus 622.0, 624, 625, 626.6	42	1.0
Bronchitis, chronic and unqualified 490-491	42	1.0
Other fracture of lower limb 821-829	41	0.9
Cataract 374	39	0.9
Diverticula of intestine 562	39	0.9
Diseases of the ear and mastoid process 380-389	36	0.8
Acute bronchitis and bronchiolitis 466	34	0.8
Asthma 493	34	0.8
All other residual	2,448	55.6
65-74 years		
All discharges	2,305	100.0
Chronic ischemic heart disease 412	159	6.9
Cerebrovascular disease 430-438	89	3.9
Diabetes mellitus 250	79	3.4
Cataract 374	75	3.3
Pneumonia, all forms 480-486	55	2.4
Malignant neoplasm of breast 174, 199.2	53	2.3
Cholelithiasis 574	48	2.1
Acute myocardial infarction 410	48	2.1
Congestive heart failure 427.0	46	2.0
Osteoarthritis and allied conditions 713	43	1.9
Hypertensive disease 400-404	39	1.7
Diverticula of intestine 562	39	1.7
Other ischemic heart disease 411, 413-414	37	1.6
65-74 years—Con.		
Malignant neoplasm of uterus and other female genital organs 180-184, 199.3, 199.4	34	1.5
Fracture of neck of femur 820	34	1.5
Other arthritis and rheumatism 710-712, 714-718	34	1.5
Malignant neoplasm of large intestine and rectum 153-154, 197.5	33	1.4
Other hernia of abdominal cavity 551, 553	32	1.4
Benign neoplasm of other and unspecified organs and tissues and neoplasms of unspecified nature 210-217, 222-233, 234.1-239	32	1.4
Uterovaginal prolapse 623	31	1.3
All other residual	1,261	54.7
75-84 years		
All discharges	1,804	100.0
Chronic ischemic heart disease 412	166	9.2
Cerebrovascular disease 430-438	120	6.7
Cataract 374	72	4.0
Pneumonia, all forms 480-486	63	3.5
Fracture of neck of femur 820	59	3.3
Congestive heart failure 427.0	52	2.9
Diabetes mellitus 250	46	2.6
Acute myocardial infarction 410	37	2.1
Osteoarthritis and allied conditions 713	37	2.0
Fracture of other and multiple sites 805-809	27	1.5
Diverticula of intestine 562	27	1.5
Malignant neoplasm of breast 174, 199.2	27	1.5
Cholelithiasis 574	27	1.5
Anemias 280-285	25	1.4
Hypertensive disease 400-404	24	1.3
Malignant neoplasm of large intestine and rectum 153-154, 197.5	24	1.3
All other residual	971	53.8
85 years and over		
All discharges	723	100.0
Chronic ischemic heart disease 412	76	10.5
Cerebrovascular disease 430-438	60	8.3
Fracture of neck of femur 820	41	5.7
Congestive heart failure 427.0	41	5.7
Pneumonia, all forms 480-486	36	5.0
Cataract 374	22	3.0
Fracture of other and multiple sites 805-809	15	2.1
Acute myocardial infarction 410	14	2.0
Fracture of upper limb 810-819	13	1.9
Hypertensive disease 400-404	13	1.9
Diabetes mellitus 250	11	1.5
Anemias 280-285	11	1.5
Diverticula of intestine 562	11	1.5
Arteriosclerosis 440	10	1.4
Osteoarthritis and allied conditions 713	10	1.4
Cholelithiasis 574	9	1.2
All other residual	330	45.6

[1] See reference 15.

Table 6. Number and percent distribution of women 65 years of age and over discharged from short-stay hospitals, by race of patient and selected most frequent first-listed diagnoses: United States, 1978

Race, first-listed diagnosis, and ICDA code[1]	Number of discharges in thousands	Percent distribution
White		
All discharges	3,884	100.0
Chronic ischemic heart disease 412	321	8.3
Cerebrovascular disease 430-438	209	5.4
Cataract 374	130	3.4
Pneumonia, all forms 480-486	125	3.2
Fracture of neck of femur 820	114	2.9
Congestive heart failure 427	110	2.8
Diabetes mellitus 250	102	2.6
Acute myocardial infarction 410	84	2.2
Osteoarthritis and allied conditions 713	71	1.8
Cholelithiasis 574	68	1.8
Malignant neoplasm of breast 174, 199.2	68	1.7
Diverticula of intestine 562	60	1.5
Hypertensive disease 400-404	55	1.4
Fracture of other and multiple sites 805-809	52	1.3
Fracture of upper limb 810-819	49	1.3
Ulcer of stomach; ulcer of duodenum; peptic ulcer, site unspecified; and gastrojejunal ulcer 531-534	48	1.2
Malignant neoplasm of large intestine and rectum 153-154, 197.5	46	1.2
Psychoses 290-299	43	1.1
Anemias 280-285	42	1.1
Other hernia of abdominal cavity 551, 553	41	1.1
Malignant neoplasm of uterus, and other female genital organs 180-184, 199.3, 199.4	41	1.1
Gastroenteritis and colitis, except ulcerative of noninfectious origin 561	41	1.1
Neoplasm of lymphatic and hematopoietic tissue 196, 200-209	38	1.0
Intestinal obstruction without mention of hernia 560	37	0.9
Uterovaginal prolapse 623	36	0.9
Acute bronchitis and bronchiolitis 466	33	0.9
Bronchitis, chronic and unqualified 490-491	32	0.8
Gastritis and duodenitis 535	28	0.7
Influenza 470-474	26	0.7
Arteriosclerosis 440	24	0.6
Benign neoplasm of other and unspecified organs and tissues and neoplasms of unspecified nature 210-217, 222-233, 234.1-239	24	0.6
All other residual	1,686	43.4
Black and all other		
All discharges	328	100.0
Chronic ischemic heart disease 412	30	9.2
Cerebrovascular disease 430-438	26	8.1
Diabetes mellitus 250	19	5.7
Hypertensive disease 400-404	12	3.6
Congestive heart failure 427.0	11	3.5
Pneumonia, all forms 480-486	10	3.0
Cataract 374	9	2.6
Malignant neoplasm of uterus and other female genital organs 180-184, 199.3, 199.4	6	1.9
Black and all other—Con.		
Malignant neoplasm of breast 174, 199.2	6	1.8
Anemias 280-285	5	1.6
Acute myocardial infarction 410	5	1.5
Psychoses 290-299	5	1.5
Osteoarthritis and allied conditions 713	4	1.2
Cholelithiasis 574	4	1.1
Diverticula of intestine 562	3	1.0
Ulcer of stomach; ulcer of duodenum; peptic ulcer, site unspecified; and gastrojejunal ulcer 531-534	3	1.0
Intestinal obstruction without mention of hernia 560	3	1.0
Fracture of neck of femur 820	3	1.0
All other residual	164	50.0
Race not stated		
All discharges	622	100.0
Chronic ischemic heart disease 412	51	8.2
Cerebrovascular disease 430-438	35	5.6
Cataract 374	30	4.8
Pneumonia, all forms 480-486	18	2.9
Congestive heart failure 427.0	18	2.9
Fracture of neck of femur 820	18	2.9
Diabetes mellitus 250	16	2.6
Osteoarthritis and allied conditions 713	14	2.3
Diverticula of intestine 564	13	2.1
Cholelithiasis 574	12	1.9
Malignant neoplasm of breast 174, 199.2	11	1.8
Acute myocardial infarction 410	10	1.6
Fracture of other and multiple sites 805-809	9	1.5
Anemias 280-285	9	1.4
Hypertensive disease 400-405	9	1.4
Malignant neoplasm of large intestine and rectum 153-154, 197.5	8	1.3
Other hernia of abdominal cavity 551, 553	7	1.1
Fracture of upper limb 810-819	6	1.0
Ulcer of stomach; ulcer of duodenum; peptic ulcer, site unspecified; and gastrojejunal ulcer 531-534	6	1.0
Arteriosclerosis 440	6	1.0
Gastroenteritis and colitis, except ulcerative of noninfectious origin 561	6	1.0
Malignant neoplasm of urinary organs 188-189, 198.0-198.1	6	1.0
Uterovaginal prolapse 623	6	1.0
Acute bronchitis and bronchiolitis 466	6	1.0
Other fracture of lower limb 821-829	6	1.0
Bronchitis, chronic and unspecified 490-491	5	0.9
Diseases of nerves and peripheral ganglia 350-358	5	0.8
Influenza 470-474	5	0.8
Psychoses 290-299	5	0.8
All other residual	266	42.8

[1] See reference 15.

Table 7. Number and rate of patients 65 years of age and over discharged from short-stay hospitals, by sex of patient and 25 selected most frequent first-listed diagnoses: United States, 1978

Sex, first-listed diagnosis, and ICDA code[1]	Number of discharges in thousands	Discharge rate per 1,000 population[2]
Female		
All discharges	4,833	338.5
Chronic ischemic heart disease 412	402	28.2
Cerebrovascular disease 430-438	270	18.9
Cataract 374	169	11.8
Pneumonia, all forms 480-486	153	10.7
Congestive heart failure 427.0	139	9.8
Diabetes mellitus 250	137	9.6
Fracture of neck of femur 820	135	9.4
Acute myocardial infarction 410	99	6.9
Osteoarthritis and allied conditions 713	90	6.3
Malignant neoplasm of breast 174, 199.2	85	5.9
Cholelithiasis 574	83	5.8
Diverticula of intestine 562	76	5.4
Hypertensive disease 400-404	76	5.3
Fracture of other and multiple sites 805-809	62	4.4
Ulcer of stomach; ulcer of duodenum; peptic ulcer, site unspecified; and gastrojejunal ulcer 531-534	58	4.0
Fracture of upper limb 810-819	57	4.0
Anemias 280-285	56	3.9
Malignant neoplasm of large intestine and rectum 153-154, 197.5	55	3.9
Psychoses 290-299	52	3.7
Malignant neoplasm of uterus and other female genital organs 180-184, 199.3, 199.4	52	3.6
Other hernia of abdominal cavity 551, 553	49	3.5
Gastroenteritis and colitis, except ulcerative or noninfectious origin 561	49	3.4
Neoplasm of lymphatic and hematopoietic tissue 196, 200-209	45	3.2
Intestinal obstruction without mention of hernia 560	44	3.1

Sex, first-listed diagnosis, and ICDA code[1]	Number of discharges in thousands	Discharge rate per 1,000 population[2]
Male		
All discharges	3,875	396.3
Chronic ischemic heart disease 412	315	32.2
Cerebrovascular disease 430-438	196	20.0
Hyperplasia of prostate 600	183	18.7
Pneumonia, all forms 480-486	158	16.1
Acute myocardial infarction 410	122	12.4
Congestive heart failure 427.0	117	12.0
Cataract 374	91	9.3
Inguinal hernia 550, 552	90	9.2
Malignant neoplasm of prostate 185, 199.5	89	9.1
Malignant neoplasm of thoracic organs 162-163, 197-197.3	77	7.8
Diabetes mellitus 250	71	7.2
Ulcer of stomach; ulcer of duodenum; peptic ulcer, site unspecified; and gastrojejunal ulcer 531-534	62	6.3
Malignant neoplasm of urinary organs 188-189, 198-198.1	60	6.1
Malignant neoplasm of large intestine and rectum 153-154, 197.5	57	5.8
Benign neoplasm of other and unspecified organs and tissues and neoplasm of unspecified nature 210-217, 222-233, 234.1-239	42	4.3
Cholelithiasis 574	41	4.2
Hypertensive disease 400-404	39	4.0
Osteoarthritis and allied conditions 713	37	3.8
Neoplasm of lymphatic and hematopoietic tissues 196, 200-209	37	3.8
Anemias 280-285	36	3.7
Diverticula of intestine 562	32	3.2
Fracture of neck of femur 820	31	3.2
Bronchitis, chronic and unqualified 490-491	30	3.0
Arteriosclerosis 440	28	2.9
Acute bronchitis and bronchiolitis 466	28	2.9

[1] See reference 15.
[2] Based on population data from the U.S. Bureau of the Census: Estimates of the population of the United States, by age, sex, and race: 1976 to 1978. Current Population Reports, Series P-25, No. 800. Washington. U.S. Government Printing Office, 1979.

Table 8. Number and percent distribution of selected most frequent all-listed surgical procedures for women discharged from short-stay hospitals, by age of patient: United States, 1978

Age, surgical procedure, and ICDA code[1]	Number in thousands	Percent distribution
45-64 years		
All procedures	3,012	100.0
Dilation and curettage of uterus, diagnostic .70.3	256	8.5
Biopsy A1-A2	255	8.5
Hysterectomy 69.1-69.5	197	6.5
Oophorectomy: Salpingo-oophorectomy 67.2-67.5	148	4.9
Cholecystectomy .43.5	113	3.7
Excision of lesion of skin and subcutaneous tissue 92.1-92.2	73	2.4
Plastic repair of cystocele and/or rectocele .71.4	68	2.2
Partial mastectomy .65.2	54	1.8
Operations on muscles, tendons, fascia, and bursa .38-39	50	1.7
Exploratory laparotomy or celiotomy .39.1	50	1.7
Complete and radical mastectomy 65.3-65.6	50	1.7
Operations on peripheral nerves .04	48	1.6
Cardiac catheterization .30.2	47	1.5
Repair of hernia other than inguinal 38.0-38.1, 38.6-38.9	43	1.4
Reduction of fracture with fixation .82.2	42	1.4
Repair and plastic operations on joints of foot and toes .87.2	41	1.4
Extraction of lens 14.4-14.6	40	1.3
Excision of bone, partial .80.4	36	1.2
Hemorrhoidectomy .51.3	34	1.1
Closed reduction of fracture without fixation .82.0	31	1.0
Resection of small intestine of colon 47.4-47.6	31	1.0
Dilation of urethra .57.5	31	1.0
All other residual	1,280	42.5
65-74 years		
All procedures	1,177	100.0
Biopsy A1-A2	107	9.1
Extraction of lens 14.4-14.6	79	6.7
Cholecystectomy .43.5	44	3.7
Reduction of fracture with fixation .82.2	42	3.6
Excision of lesion of skin and subcutaneous tissue 92.1-92.2	34	2.9
Dilation and curettage of uterus, diagnostic .70.3	31	2.7
Hysterectomy 69.1-69.5	30	2.6
Resection of small intestine or colon 47.4-47.6	30	2.6
Complete and radical mastectomy 65.3-65.6	24	2.1
Plastic repair of cystocele and/or rectocele .71.4	23	2.0
Closed reduction of fracture without fixation .82.0	22	1.9
Exploratory laparotomy or celiotomy .39.1	20	1.7
Cardiac catheterization .30.2	20	1.7
Oophorotomy: salpingo-oophorotomy 67.2-67.5	20	1.7
Repair of hernia other than inguinal 38.0-38.1, 38.4-38.9	18	1.5
Insertion or replacement of electric heart device 30.4-30.5	17	1.5
Other operations on peripheral blood vessels 24.0-24.3, 24.5-24.9	16	1.4
Arthroplasty of hip .87.0	15	1.3
Operations on peripheral nerves .04	15	1.2
Operations on muscles, tendons, fascia, and bursa .88-89	14	1.2
Repair and plastic operations on joints of foot and toes .87.2	13	1.1
Partial mastectomy .65.2	13	1.1
Dilation of urethra .57.5	12	1.0
Repair and plastic operations on other joints .87.3	11	1.0
65-74 years—Con.		
Local excision and destruction of lesion of bladder 56.1-56.2	11	0.9
Skin graft except lip and mouth .01	10	0.8
Ileostomy, colostomy, and other enterostomy 47.7-47.9	10	0.8
Hemorrhoidectomy .51.3	9	0.8
Thyroidectomy 22.1-22.2	8	0.7
Excision of bone, partial .80.4	8	0.7
All other residual	451	38.3
75-84 years		
All procedures	686	100.0
Extraction of lens 14.4-14.6	73	10.7
Biopsy A1-A2	63	9.1
Reduction of fracture with fixation .82.2	62	9.0
Insertion or replacement of electric heart device 30.4-30.5	28	4.0
Cholecystectomy .43.5	22	3.2
Resection of small intestine or colon 47.4-47.6	19	2.8
Closed reduction of fracture without fixation .82.0	17	2.4
Excision of lesion of skin and subcutaneous tissue 92.1-92.2	16	2.3
Complete and radical mastectomy 65.3-65.6	14	2.0
Exploratory laparotomy or celiotomy .39.1	13	1.9
Dilation and curettage of uterus, diagnostic .70.3	11	1.7
Local excision and destruction of lesion of bladder 56.1-56.2	9	1.3
Dilation of urethra .57.5	8	1.2
Repair of hernia other than inguinal 38.0-38.1, 38.4-38.9	8	1.2
Hysterectomy 69.1-69.5	8	1.2
Ileostomy, colostomy, and other enterostomy 47.7-47.9	8	1.1
Arthroplasty of hip .87.0	8	1.1
Skin graft except lip and mouth .01	8	1.1
Other operations on peripheral blood vessels 24.0-24.3, 24.5-24.9	7	1.0
Partial mastectomy .65.2	7	1.0
Oophorectomy: salpingo-oophorectomy 67.2-67.5	6	0.9
Repair of inguinal hernia 38.2-38.3	6	0.8
All other residual	264	38.5
85 years and over		
All procedures	210	100.0
Reduction of fracture with fixation .82.2	39	18.6
Extraction of lens 14.4-14.6	22	10.5
Insertion or replacement of electric heart 30.4-30.5	13	6.0
Biopsy A1-A2	12	5.8
Closed reduction of fracture without fixation .82.0	8	3.9
Excision of lesion of skin and subcutaneous tissue 92.1-92.2	7	3.2
Cholecystectomy .43.5	6	3.0
Exploratory laparotomy or celiotomy .39.1	5	2.4
Resection of small intestine or colon 47.4-47.6	4	2.1
Other operations on peripheral blood vessels 24.0-24.3, 24.5-24.9	4	1.8
Local excision and destruction of lesion of bladder 56.1-56.2	4	1.7
Repair of hernia other than inguinal 38.0-38.1, 38.4-38.9	3	1.5
Ileostomy, colostomy, and other enterostomy 47.7-47.9	3	1.5
All other residual	80	38.1

[1] See reference 15.

Table 9. Number and percent distribution of selected most frequent all-listed surgical procedures for women 65 years of age and over discharged from short-stay hospitals, by race of patient: United States, 1978

Race, surgical procedure, and ICDA code[1]	Number in thousands	Percent distribution
White		
All procedures	1,671	100.0
Biopsy A1-A2	150	9.0
Extraction of lens 14.4-14.6	134	8.0
Reduction of fracture with fixation .82.2	120	7.2
Cholecystectomy .43.5	59	3.5
Excision of lesion of skin and subcutaneous tissue 92.1-92.2	47	2.8
Insertion or replacement of electric heart device 30.4-30.5	47	2.8
Resection of small intestine or colon 47.4-47.6	41	2.4
Closed reduction of fracture without fixation .82.0	41	2.4
Dilation and curettage of uterus, diagnostic .70.3	37	2.2
Complete and radical mastectomy 65.3-65.6	34	2.1
Hysterectomy 69.1-69.5	33	2.0
Exploratory laparotomy or celiotomy .39.1	29	1.8
Plastic repair of cystocele and/or rectocele .71.4	25	1.5
Oophorectomy, salpingo-oophorectomy 67.2-67.5	22	1.3
Cardiac catheterization .30.2	22	1.3
Arthroplasty of hip .87.0	19	1.2
Dilation of urethra .57.5	18	1.1
Local excision and destruction of lesion of bladder 56.1-56.2	18	1.1
Ileostomy, colostomy, and other enterostomy 47.7-47.9	17	1.0
Partial mastectomy .85.2	16	1.0
Operations of peripheral nerves .04	16	0.9
Repair and plastic operations on joints of foot and toes .87.2	15	0.9
Operations on muscles, tendons, fascia, and bursa .88-89	15	0.9
Skin graft except lip and mouth 93.2-93.6	15	0.9
Repair of inguinal hernia 38.2-38.3	12	0.7
All other residual	669	40.0
Black and all other		
All procedures	117	100.0
Black and all other—Con.		
Biopsy A1-A2	11	9.4
Extraction of lens 14.4-14.6	10	8.3
Insertion or replacement of electric heart device 30.4-30.5	4	3.6
Excision of lesion of skin and subcutaneous tissue 92.1-92.2	4	3.4
Exploratory laparotomy or celiotomy .39.1	4	3.4
Reduction of fracture with fixation .82.2	4	3.4
Cholecystectomy .43.5	4	3.0
Dilation and curettage of uterus, diagnostic .70.3	3	2.7
All other residual	73	62.4
Race not stated		
All procedures	284	100.0
Extraction of lens 14.4-14.6	30	10.6
Biopsy A1-A2	20	7.2
Reduction of fracture with fixation .82.2	19	6.8
Resection of small intestine and colon 47.4-47.6	10	3.6
Cholecystectomy .43.5	9	3.2
Insertion or replacement of electric heart device 30.4-30.5	7	2.4
Excision of lesions of skin and subcutaneous tissue 92.1-92.2	6	2.1
Closed reduction of fracture without fixation .82.0	5	1.7
Local excision and destruction of lesion of bladder 56.1-56.2	5	1.7
Exploratory laparotomy or celiotomy .39.1	5	1.6
Hysterectomy 69.1-69.5	5	1.6
Operations on muscles, tendons, fascia, and bursa .88-89	4	1.5
Complete and radical mastectomy .65.2	4	1.4
Dilation and curettage, diagnostic .70.3	4	1.4
Arthroplasty of hip .87.0	3	1.2
Plastic repair of cystocele and/or rectocele .71.4	3	1.1
All other residual	145	51.1

[1] See reference 15.

Table 10. Average length of stay of women 65 years of age and over discharged from short-stay hospitals, by 20 selected most frequent surgical procedures: United States, 1978

Surgical procedure and ICDA code[1]	*Average length of stay in days*
All procedures	14.2
Biopsy A1-A2	13.9
Extraction of lens 14.4-14.6	4.8
Reduction of fracture with fixation 82.2	21.3
Cholecystectomy 43.5	15.8
Insertion or replacement of electric heart device 30.4-30.5	14.7
Excision of lesion of skin and subcutaneous tissue 92.1-92.2	11.2
Resection of small intestine or colon 47.4-47.6	24.6
Closed reduction of fracture without fixation 82.0	13.2
Dilation and curettage of uterus, diagnostic 70.3	6.7
Complete and radical mastectomy 85.3-85.6	12.0
Hysterectomy 69.1-69.5	11.8
Exploratory laparotomy or celiotomy 39.1	18.8
Plastic repair of cystocele and/or rectocele 71.4	10.4
Oophorectomy, salpingo-oophorectomy 67.2-67.5	15.2
Cardiac catheterization 30.2	13.4
Arthroplasty of hip 87.0	2.3
Local excision and destruction of lesion of bladder 56.1-56.2	10.0
Dilation of urethra 57.5	13.1
Ileostomy, colostomy, and other enterostomy 47.7-47.9	28.3
Partial mastectomy 85.2	7.1

[1] See reference 15.

Table 11. Hospital fatality rate of women 65 years of age and over discharged from short-stay hospitals, by first-listed diagnostic category: United States, 1978

First-listed diagnostic category and ICDA code[1]	*Hospital fatality rate*[2]
All discharges	6.2
Infective and parasitic diseases 000-136	11.3
Neoplasms 140-239	11.9
Endocrine, nutritional, and metabolic diseases 240-279	3.0
Diseases of the blood and blood-forming organs 280-289	1.9
Mental disorders 290-315	1.6
Diseases of the nervous system and sense organs 320-389	1.1
Diseases of the circulatory system 390-458	11.3
Diseases of the respiratory system 460-519	7.2
Diseases of the digestive system 520-577	2.9
Diseases of the genitourinary system 580-629	2.3
Complications of pregnancy, childbirth, and the puerperium 630-678	*
Diseases of the skin and subcutaneous tissue 680-709	2.3
Diseases of the musculoskeletal system and connective tissue 710-738	0.6
Congenital anomalies 740-759	*
Certain causes of perinatal morbidity and mortality 760-778	*
Symptoms and ill-defined conditions 780-792, 794-796	3.6
Accidents, poisonings, and violence 800-899	1.8
Special conditions and examinations without sickness or tests with negative findings 793, Y00-Y13	

[1] See reference 15.

[2] $\left(\frac{\text{Number of deaths}}{\text{Total number of patients discharged}}\right) \times 100.$

Table 12. Number and hospital fatality rate of women 65 years of age and over discharged from short-stay hospitals, by discharge status and surgical category: United States, 1978

Surgical category and ICDA code[1]	Discharge status			Hospital fatality rate
	Alive	Dead	Not stated	
	Number of discharges in thousands			
All operations	1,317	58	82	4.0
Neurosurgery 01-05	26	2	2	6.5
Ophthalmology 06-14	204	1	12	0.4
Otorhinolaryngology 16-21	24	2	2	6.2
Operations on thyroid, parathyroid, thymus, and adrenals 22-23	10	-	1	-
Vascular and cardiac surgery 24-30	103	17	7	13.4
Thoracic surgery 32-35	24	3	2	9.1
Abdominal surgery 38-48	201	14	12	6.2
Proctological surgery 50-52	27	-	1	-
Urological surgery 54-61	64	2	3	2.8
Breast surgery 65	41	1	2	1.2
Gynecological surgery 67-72	101	-	5	-
Obstetrical procedures 74-78	•	•	•	•
Orthopedic surgery 80-90	296	11	18	3.5
Plastic surgery 92-94	67	-	4	-
Oral and maxillofacial surgery 95-98	10	-	-	-
Dental surgery 99	10	-	1	-
Biopsy A1-A2	111	5	9	3.6

[1] See reference 15.

[2] $\left(\frac{\text{Number of deaths}}{\text{Total number of death discharges}}\right) \times 100.$

Table 13. Percent distribution of women 65 years of age and over discharged from nursing homes by primary diagnosis at admission, according to age of patient: United States, 1976

Primary diagnosis at admission[1]	Female discharges 65 years and over	Age		
		65-74 years	75-84 years	85 years and over
	Percent distribution			
All discharges	100.0	100.0	100.0	100.0
Diseases of the circulatory system				
Total	47.5	36.5	49.4	49.9
Congestive heart failure	6.1	*	5.4	8.0
Arteriosclerosis	21.0	10.9	20.4	26.2
Hypertension	2.2	*	2.1	2.3
Stroke	11.6	12.9	13.8	8.2
Heart attack, ischemic heart disease	4.1	*	5.7	3.0
Other	2.5	*	2.0	2.2
Mental disorders and senility without psychosis				
Total	8.6	11.6	7.8	8.2
Senile psychosis	1.2	*	*	*
Other psychosis	1.0	*	*	*
Chronic brain syndrome	4.6	5.5	4.5	4.2
Senility without psychosis	1.0	*	*	*
Mental retardation	*	*	*	.
Alcoholism and other mental disorders	*	*	*	*
Other diagnoses[2]				
Total	41.8	50.3	40.4	39.8
Diseases of the musculoskeletal system and connective tissue:				
Arthritis and rheumatism	3.3	*	2.4	4.9
Diseases of the nervous system and sense organs:				
Parkinson's disease	0.9	*	*	*
Accidents, poisonings, and violence:				
Fractures, all sites	12.4	9.8	12.0	14.1
Endocrine, nutritional, and metabolic diseases:				
Diabetes	4.1	6.4	4.5	2.6
Neoplasms:				
Cancer	6.2	8.8	7.0	4.2
Diseases of the respiratory system:				
Total	2.7	*	2.4	2.3
Diagnoses unknown				
Total	2.1	*	2.4	*

[1] See reference 15.
[2] Only diagnoses of sufficient magnitude are noted.

Table 14. Number and rate per 1,000 patients 65 years of age and over discharged from nursing homes, by sex of patient and chronic condition and impairment: United States, 1976

Chronic condition and impairment[1, 2]	*Sex*	
	Female	*Male*
	Number of discharges	
All discharges	640,900	340,300
Diseases of the circulatory system	Rate per 1,000 discharges	
Arteriosclerosis	470.0	416.5
Hypertension	169.5	127.8
Stroke	197.4	252.1
Paralysis or palsy, other than arthritis, related to stroke	41.4	59.9
Heart trouble	379.4	369.1
Mental disorders and senility without psychosis		
Mental illness	38.7	29.2
Chronic brain syndrome	196.5	186.7
Senility	244.7	188.8
Mental retardation	*	*
Alcoholism	*	41.0
Drug addiction	*	*
Insomnia	13.3	14.8
Other chronic conditions or impairments		
Diseases of the musculoskeletal system and connective tissue:		
Arthritis and rheumatism	184.8	110.3
Chronic back, spine problems, excluding stiffness and deformity	30.6	18.7
Permanent stiffness or deformity of back, arms, legs, or extremities, including feet, toes, hands, or fingers	62.1	58.0
Missing arms, legs, or extremities, including feet, toes, hands, or fingers	18.7	47.8
Diseases of the nervous system and sense organs:		
Blindness	42.3	45.0
Glaucoma	24.8	*
Cataracts	56.5	35.7
Deafness	45.1	55.8
Parkinson's disease	25.2	35.1
Paralysis or palsy, other than arthritis, unrelated to stroke	*	18.0
Accidents, poisonings, and violence:		
Hip fracture	147.5	69.5
Other bone fracture	69.1	37.9
Endocrine, nutritional, and metabolic diseases:		
Diabetes	143.9	142.7
Neoplasms:		
Cancer	84.2	149.5
Diseases of the respiratory system:		
Chronic respiratory disease	69.4	133.5
Diseases of the digestive system:		
Constipation	52.0	32.1
Diseases of the blood and blood-forming organs:		
Anemia	65.2	55.3
Diseases of the skin and subcutaneous tissue:		
Bedsores	34.0	30.9
Other:		
Edema	101.5	79.5
Kidney trouble	88.5	148.1
None of these conditions		
Total	31.4	25.2
Conditions unknown		
Total	9.7	*

[1] See reference 15.
[2] Patient may have had more than 1 reported condition or impairment.

Table 15. Percent distribution of women 65 years of age and over discharged from nursing homes by selected primary diagnoses at admission, according to selected chronic conditions and impairments: United States, 1976

Primary diagnosis at admission[1]	Chronic condition and impairment[1]												
	Diseases of the circulatory system				Mental disorders and senility without psychosis			Other chronic conditions and impairments					None of these conditions
	Total	Arterio-sclerosis	Hyper-tension	Heart trouble	Total	Chronic brain syndrome	Senility	Total	Arthritis and rheumatism	Hip fractures	Diabetes	Cancer	
	Percent distribution												
All discharges	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Diseases of the circulatory system													
Total	64.7	66.0	66.4	70.1	48.3	47.5	51.7	40.5	48.7	20.8	42.2	11.5	•
Congestive heart failure	8.4	6.7	8.1	16.2	5.1	4.5	5.9	5.6	7.4	•	6.0	•	•
Arteriosclerosis	28.6	44.7	21.6	24.1	26.4	26.7	28.5	18.5	25.5	11.0	16.5	•	•
Hypertension	3.0	1.7	13.1	•	20.0	•	•	2.0	•	•	•	•	•
Stroke	15.8	7.6	18.1	10.5	9.6	8.3	11.1	10.0	8.4	•	13.8	•	•
Heart attack, ischemic heart disease	5.6	2.9	•	10.8	4.1	5.1	•	2.6	•	•	•	•	•
Mental disorders and senility without psychosis													
Total	6.1	6.9	4.6	3.8	21.8	27.2	17.9	6.4	6.1	•	5.4	•	•
Other diagnoses[2]													
Total	28.6	26.4	28.4	25.3	29.2	25.1	29.6	52.1	44.4	74.1	51.5	84.3	57.0
Diseases of the musculoskeletal system and connective tissue:													
Arthritis and rheumatism	1.9	1.9	•	•	2.7	•	3.5	4.5	17.9	•	•	•	.
Accidents, poisonings, and violence:													
Hip fractures	7.1	7.3	7.0	5.2	6.3	6.1	6.6	13.2	4.3	65.6	•	•	•
Endocrine, nutritional, and metabolic diseases:													
Diabetes	3.7	3.5	•	3.5	3.8	•	4.0	5.6	•	•	28.4	•	.
Neoplasms:													
Cancer	3.4	3.3	•	2.8	2.6	•	•	8.5	•	•	•	74.0	•
Diagnoses unknown													
Total	•	•	•	•	•	•	•	•	•	•	•	•	27.2

[1] See reference 15.
[2] Only diagnoses of sufficient magnitude are noted.

Table 16. Number and rate per 1,000 women discharged from nursing homes, by age of patient and chronic condition and impairment: United States, 1976

Chronic condition and impairment[1,2]	Age				
	All ages	Under 65 years	65-74 years	75-84 years	85 years and over
	Number of discharges in thousands				
All discharges	709,800	68,800	105,000	297,200	238,700
	Rate per 1,000 discharges				
Diseases of the circulatory system					
Arteriosclerosis	432.6	84.2	319.7	455.6	554.1
Hypertension	164.6	119.1	185.9	179.1	150.3
Stroke	189.6	117.0	194.1	227.1	162.0
Paralysis or palsy, other than arthritis, related to stroke	42.1	*	64.2	44.4	27.4
Heart trouble	353.8	114.7	283.7	392.1	405.8
Mental disorders and senility without psychosis					
Mental illness	58.4	242.6	79.9	42.9	*
Chronic brain syndrome	187.2	100.9	198.3	180.7	215.3
Senility	226.3	*	160.9	213.7	320.2
Mental retardation	12.9	73.4	*	*	*
Alcoholism	10.6	*	*	*	*
Drug addiction	3.0	*	*	*	*
Insomnia	15.6	*	*	*	*
Other chronic conditions or impairments					
Diseases of the musculoskeletal system and connective tissue:					
Arthritis and rheumatism	172.9	*	132.1	167.1	230.2
Chronic back, spine problems, excluding stiffness and deformity	32.9	*	*	30.8	29.1
Permanent stiffness or deformity of back, arms, legs, or extremities, including feet, toes, hands, or fingers	63.1	72.7	64.1	56.5	68.1
Missing arm, legs, or extremities, including feet, toes, hands, or fingers	17.8	*	*	26.0	14.0
Diseases of the nervous system and sense organs:					
Blindness	40.0	*	*	24.7	64.7
Glaucoma	22.6	*	*	29.6	28.2
Cataracts	52.0	*	*	51.3	75.5
Deafness	41.3	*	*	39.2	64.0
Parkinson's disease	24.7	*	*	31.4	*
Paralysis or palsy, other than arthritis, unrelated to stroke	14.5	81.5	*	*	*
Accidents, poisonings, and violence:					
Hip fracture	141.2	82.6	103.0	136.7	180.5
Other bone fracture	67.9	*	*	60.8	92.3
Endocrine, nutritional, and metabolic diseases:					
Diabetes	141.6	119.5	205.9	151.3	107.6
Neoplasms:					
Cancer	90.9	153.6	100.9	91.5	67.7
Diseases of the respiratory system:					
Chronic respiratory disease	65.1	*	86.3	59.8	74.0
Diseases of the digestive system:					
Constipation	50.0	*	55.2	45.4	58.8
Diseases of the blood and blood-forming organs:					
Anemia	62.3	*	48.7	63.0	75.1
Diseases of the skin and subcutaneous tissue:					
Bedsores	32.9	*	*	37.1	33.9
Other:					
Edema	97.5	*	81.8	98.0	114.5
Kidney trouble	87.9	82.6	86.5	90.7	86.5
None of these conditions					
Total	37.1	89.6	*	31.9	26.7
Conditions unknown					
Total	9.5	*	*	*	*

[1] See reference 15.
[2] Patient may have had more than 1 reported condition or impairment.

Table 17. Number and percent distribution of women 65 years age and over discharged from nursing homes, by selected health services received, according to level of care and length of stay: United States, 1976

Health service received	Level of care during last 7 days			Length of stay			
	Nursing care		Personal care or none	Less than 1 month	1 month to less than 3	3 months to less than 6	6 months or more
	Intensive	Other					
	Number of discharges in thousands						
All discharges	374,700	208,500	57,700	200,200	121,500	77,500	241,700
	Percent distribution						
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Physician service							
Time since last physician visit:							
Less than 1 week	51.6	46.9	24.7	58.5	48.2	36.2	42.0
1 week or more	37.7	40.0	39.4	21.3	40.7	56.8	46.1
No physician visit while in facility	4.8	6.1	8.9	13.0	5.0	*	*
Unknown if any physician visits	5.8	7.0	27.0	7.1	6.2	*	10.8
Services received at last physician visit:[1]							
Examination	81.7	80.0	51.3	70.3	81.5	83.6	81.8
Treatment	51.6	44.5	35.3	47.7	46.1	51.9	47.4
Prescription	18.1	8.8	9.4	12.4	14.3	16.5	15.2
Orders for laboratory tests	18.0	13.2	9.4	15.1	13.8	17.2	16.5
Other services	8.1	6.6	*	7.1	5.8	6.8	8.4
Therapy service							
No therapy service or unknown	64.1	62.9	70.7	64.5	53.7	60.7	70.6
Therapy service during last month	35.9	37.1	29.3	35.5	46.3	39.3	29.4
Other health service							
Special diet received last 7 days:							
No special diet	51.9	59.0	80.4	53.2	57.9	56.7	59.2
Special diet	48.1	41.0	19.6	46.8	42.1	43.3	40.8

[1]Percents will not add to 100.0 because more than 1 service may have been rendered.

Table 18. Average length of stay of women 65 years of age and over discharged from nursing homes, by discharge status and primary diagnosis at admission: United States, 1976

Primary diagnosis at admission[1]	Discharge status		
	Total[2]	Alive	Dead
	Average length of stay in days		
All discharges	401	305	644
Diseases of the circulatory system			
Total	424	318	642
Congestive heart failure	398	285	558
Arteriosclerosis	483	367	725
Hypertension	498	341	1,018
Stroke	381	279	562
Heart attack, ischemic heart disease	340	281	491
Other	253	207	*
Mental disorders and senility without psychosis			
Total	761	601	1,044
Senile psychosis	836	571	1,231
Other psychosis	725	660	*
Chronic brain syndrome	724	571	942
Senility without psychosis	578	*	*
Mental retardation	*	*	*
Alcoholism and other mental disorders	*	*	*
Other diagnoses[3]			
Total	298	238	513
Diseases of the musculoskeletal system and connective tissue:			
Arthritis and rheumatism	464	398	*
Diseases of the nervous system and sense organs:			
Parkinson's disease	696	*	*
Accidents, poisonings, and violence:			
Hip fracture	289	231	564
Other bone fracture	126	109	*
Endocrine, nutritional, and metabolic diseases:			
Diabetes	426	311	*
Neoplasms:			
Cancer	185	183	187
Diseases of the respiratory system:			
Total	266	210	*
Diagnosis unknown			
Total	472	402	*

[1] See reference 15.
[2] Includes a small number with unknown discharge status.
[3] Only diagnoses of sufficient magnitude are noted.

Table 19. Percent distribution of women 65 years of age and over discharged from nursing homes by discharge status, according to selected health statuses: United States, 1976

Health status	Discharge status		
	Total[1]	Alive	Dead
	Percent distribution		
All discharges	100.0	71.6	28.3
Selected primary diagnosis at admission			
Diseases of the circulatory system:			
Congestive heart disease	100.0	58.4	41.6
Arteriosclerosis	100.0	67.7	32.3
Stroke	100.0	63.6	36.2
Heart attack, ischemic heart disease	100.0	71.6	28.4
Mental disorders and senility without psychosis:			
Chronic brain syndrome	100.0	58.7	41.3
Other diagnoses:			
Hip fractures	100.0	82.5	17.5
Cancer	100.0	47.7	52.3
Selected chronic conditions and impairments			
Cancer	100.0	49.5	50.5
Bedsores	100.0	54.6	45.4
Mobility			
Walks, with or without assistance	100.0	88.8	11.1
Chairfast	100.0	66.7	33.3
Bedfast	100.0	38.8	61.0
Unknown	100.0	81.9	17.6
Continence			
No difficulty controlling bowels or bladder	100.0	88.7	11.3
Difficulty controlling bowels	100.0	76.0	22.8
Difficulty controlling bladder	100.0	70.5	29.2
Difficulty controlling both bowels and bladder	100.0	50.0	49.9
Ostomy in either bowels or bladder	100.0	52.7	47.0
Unknown as to both bowels and bladder	100.0	64.4	35.0

[1] Includes a small number with unknown discharge status.

Appendixes

Contents

I. Definitions of terms used in the National Ambulatory Medical Care Survey 56
Terms relating to the survey 56
Terms relating to the Patient Record form 56

II. Definitions of terms used in the National Hospital Discharge Survey 59
Hospitals and hospital characteristics 59
Terms relating to hospitalization 59
Terms relating to diagnoses 59
Terms relating to surgery 59
Demographic terms 60

III. Definitions of terms used in the National Nursing Home Survey 61
Terms relating to facilities 61
Terms relating to discharges 61

IV. Questionnaires used in the National Ambulatory Medical Care Survey, the National Hospital Discharge Survey, and the National Nursing Home Survey 63
Patient Record and Patient Log 63
Medical Abstract 64
Discharged Resident Questionnaire 65

Appendix I. Definitions of terms used in the National Ambulatory Medical Care Survey

Terms relating to the survey

Office(s).—Premises identified by the physician as locations for his ambulatory practice. The responsibility over time for patient care and professional services rendered there generally resides with the individual physician rather than with any institution.

Ambulatory patient.—An individual seeking personal health services, who is neither bedridden nor currently admitted to any health care institution on the premises.

Physician.—Classified as either:

In scope: All duly licensed doctors of medicine and doctors of osteopathy currently in practice who spend time in caring for ambulatory patients at an office location.

Out of scope: Those physicians who treat patients only indirectly, including specialists in anesthesiology, pathology, forensic pathology, radiology, therapeutic radiology, and diagnostic radiology, and the following physicians:

Physicians in military service.

Physicians who treat patients only in an institutional setting (e.g., patients in nursing homes and hospitals).

Physicians employed full time by an industry or institution and having no private practice (e.g., physicians who work for the Veterans Administration, the Ford Motor Company, etc.).

Physicians who spend no time seeing ambulatory patients (e.g., physicians who only teach, are engaged in research, or are retired).

Patients.—Classified as either:

In scope: All patients seen by the physician or a member of his staff in his office(s).

Out of scope: Patients seen by the physician in a hospital, nursing home, or other extended care institution, or the patient's home. [Note: If the physician has a *private* office (fitting the definition "office") located in a hospital, the ambulatory patients seen there are considered in scope.] The following types of patients are considered out of scope:

Patients seen by the physician in an institution (including outpatient clinics of hospitals) for whom the institution has the primary responsibility over time.

Patients who telephone and receive advice from the physician.

Patients who come to the office only to leave a specimen, pick up insurance forms, or pay their bills.

Patients who come to the office only to pick up medications previously prescribed by the physician.

Visit.—A direct, personal exchange between an ambulatory patient and a physician (or members of his staff) for the purpose of seeking care and rendering health services.

Physician specialty.—Principal specialty (including general practice) as designated by the physician at the time of the survey. Those physicians for whom a specialty was not obtained were assigned the principal specialty recorded in the master physician files maintained by the American Medical Association or the American Osteopathic Association.

Terms relating to the Patient Record form

Age.—The age calculated from date of birth was the age at last birthday on the date of visit.

Color or race.—On the Patient Record form, color or race includes four categories: white, Negro or black, other, and unknown. The physician was instructed to mark the category, which in his judgment, was most appropriate for the patient based on observation and prior knowledge or both. The category

"other" was restricted to Orientals, American Indians, and persons of other nonwhite, non-Negro races.

Patient's complaint(s), symptom(s), or other reason(s) for this visit (in patient's own words).—The patient's principal problem, complaint, symptom, or other reason for this visit as expressed by the patient. Physicians were instructed to record key words or phrases *verbatim* to the extent possible, listing that problem first which, in the physician's judgment, was most responsible for the patient's visit.

Principal diagnoses.—The physician's diagnosis of the patient's principal problem, complaint, or symptom. In the event of multiple diagnoses, the physician was instructed to list them in order of decreasing importance; "principal" refers to the first-listed diagnosis. The diagnosis represents the physician's best judgment at the time of the visit and may be tentative, provisional, or definitive.

Other significant current diagnosis.—The diagnosis of any other condition known to exist for the patient at the time of the visit. Other diagnoses may or may not be related to the reason for that visit.

Seriousness of problem.—Seriousness includes four categories: very serious, serious, slightly serious, and not serious. The physician was instructed to check one of the four categories according to his own evaluation of the seriousness of the patient's problem causing this visit. Seriousness refers to the physician's clinical judgment as to the extent of the impairment that might result if no care were given.

Diagnostic services this visit.—Physicians were instructed to check any of the following services that were ordered or provided during the current visit:

Limited exam or history: History and physical examination or both that is limited to a specific body site or system or is concerned primarily with the patient's chief complaint, for example, pelvic or eye examinations.

General exam or history: History and physical examination or both of a comprehensive nature, including all or most body systems.

Pap test: Papanicolaou test, self-explanatory.

Clinical lab test: One or more laboratory procedures or tests, including examination of blood, urine, sputum, smears, exudates, transudates, feces, and gastric content, and including chemistry, serology, bacteriology, and pregnancy test (excludes Pap test).

X-ray: Any single or multiple X-ray examination for diagnostic or screening purposes. Radiation therapy is not included in this category.

EKG: Electrocardiogram, self-explanatory.

Vision test: Visual acuity test.

Endoscopy: Examination of the interior of any body cavity, except ear, nose, and throat, by means of an endoscope.

Blood pressure check: Self-explanatory.

Other: All other diagnostic services ordered or provided that are not included in the preceding categories.

Therapeutic services this visit.—Physicians were instructed to check any of the following services that were ordered or provided during the current visit:

Immunization or desensitization: Administration of any immunizing, vaccinating, or desensitizing agent or substance by any route, for example, syringe, needle, oral, gun, or scarification.

Drugs (prescription or nonprescription): Drugs, vitamins, hormones, ointments, suppositories, or other medications ordered or provided, except injections and immunizations. Includes both prescription and nonprescription (over-the-counter) medication.

Diet counseling: Instructions, recommendations, or advice regarding diet or dietary habits.

Family planning: Services, counseling, or advice that might enable patients to determine the number and spacing of their children. Includes both contraception and infertility services.

Medical counseling: Instructions and recommendations regarding any health problem, including advice or counsel about change of habit or behavior. Physicians were instructed to check this category only if the medical counseling was a *significant* part of the treatment. (Excludes diet and family planning counseling.)

Physiotherapy: Any form of physical therapy ordered or provided, including any treatment using heat, light, sound, or physical pressure or movement, for example, ultrasonic, ultraviolet, infrared, whirlpool, diathermy, cold therapy, and manipulative therapy.

Office surgery: Any surgical procedure performed in the office this visit, including suture of wounds, reduction of fractures, and draining of abscesses, application of supportive materials for fractures and sprains, and all irrigations, aspirations, dilatations, and excisions.

Psychotherapy or therapeutic listening: All treatments designed to produce a mental or emotional response through suggestion, persuasion, reeducation, reassurance, or support, including psychological counseling, hypnosis, psychoanalysis, and transactional therapy.

Other: Treatments ordered or provided that are not included in the preceding categories.

Disposition this visit.—Eight categories are provided to describe the physician's disposition of the case as follows:

No followup planned: No return visit or tele-

phone contact was scheduled for the patient's problem.

Return at specified time: Patient was told to schedule an appointment or was instructed to return at a particular time.

Return if needed, P.R.N.: No future appointment was made, but the patient was instructed to make an appointment with the physician if the patient considered it necessary.

Telephone followup planned: Patient was instructed to telephone the physician on a particular day to report on his progress or to telephone if the need arose.

Referred to other physician: Patient was instructed to consult or seek care from another physician. The patient may or may not return to this physician at a later date.

Returned to referring physician: Patient was referred to this physician and was now instructed to consult again with the physician who referred him.

Admit to hospital: Patient was instructed that further care or treatment would be provided in a hospital. No further office visits were expected prior to that admission.

Other: Any other disposition of the case not included in the previous categories.

Appendix II. Definitions of terms used in the National Hospital Discharge Survey

Hospitals and hospital characteristics

Hospitals.—Short-stay special and general hospitals having six beds or more for inpatient use and an average length of stay of less than 30 days. Federal hospitals and hospital units of institutions are not included.

Terms relating to hospitalization

Patient.—A person who is formally admitted to the inpatient service of a short-stay hospital for observation, care, diagnosis, or treatment. In this report the number of patients refers to the number of discharges during the year including any multiple discharges of the same individual from one short-stay hospital or more. Infants admitted on the day of birth, directly or by transfer from another medical facility, with or without mention of a disease, disorder, or immaturity are included. All newborn infants, defined as those admitted by birth to the hospital, are excluded. The terms "patient" and "inpatient" are used synonymously.

Discharge.—The formal release of a patient by a hospital; that is, the termination of a period of hospitalization by death or by disposition to place of residence, nursing home, or another hospital. The terms "discharges" and "patients discharged" are used synonymously.

Discharge rate.—The ratio of the number of hospital discharges during a year to the number of persons in the total resident population on July 1 of that year.

Days of care.—The total number of patient days accumulated at time of discharge by patients discharged from short-stay hospitals during a year. A stay of less than 1 day (patient admission and discharge on the same day) is counted as 1 day in the summation of total days of care. For patients admitted and discharged on different days, the number of days of care is computed by counting all days from (and including) the date of admission to (but not including) the date of discharge.

Average length of stay.—The total number of patient days accumulated at time of discharge by patients discharged during the year divided by the number of patients discharged.

Terms relating to diagnoses

Discharge diagnoses.—One or more diseases or injuries (or special conditions and examinations without sickness or tests with negative findings) that the attending physician assigns to the medical record of patients. In the NHDS all discharge (or final) diagnoses listed on the face sheet (summary sheet) of the medical record for patients discharged from the inpatient service of short-stay hospitals are transcribed in the order listed. Each sample discharge is assigned a maximum of five 3- or 4-digit codes according to the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States* (ICDA),[15] and coding modifications for use in the NHDS. The number of principal or first-listed diagnoses is equivalent to the number of discharges.

First-listed diagnosis.—The coded diagnosis either identified as the principal diagnosis or listed first on the face sheet of the medical record. The number of first-listed diagnoses is equivalent to the number of discharges.

All-listed diagnoses.—First-listed diagnosis and all other diagnoses in positions 2-5 on the face sheet of the medical record.

Terms relating to surgery

Discharges with surgery.—The estimated number of surgically treated patients discharged from non-Federal short-stay hospitals during the year.

Operation.—One or more surgical operations, procedures, or special treatments that are assigned by the physician to the medical record of patients discharged

from the inpatient service of short-stay hospitals. In the NHDS, all terms listed on the face sheet (summary sheet) of the medical record under the captions "operation," "operative procedures," "operations and/or special treatments," and the like are transcribed in the order listed. A maximum of three 3-digit codes is assigned per sample discharge according to ICDA and NHDS directives.

All-listed operations.—All coded operations listed in positions 1-3 on the face sheet of the medical record exclusive of certain obstetrical procedures, diagnostic endoscopy and radiography, radiotherapy, and certain other treatments not generally considered as surgery.

Demographic terms

Age.—Patient's age refers to age at birthday prior to admission to the hospital inpatient service.

Race.—Patients are classified into two racial groups, "white" and "black and all other." The black and all other classification includes all categories other than white. Mexican and Puerto Rican are included in the white category unless specifically identified as all other.

Appendix III. Definitions of terms used in the National Nursing Home Survey

Terms relating to facilities

Facility.—Nursing homes included in the 1977 National Nursing Home Survey were those classified by the 1973 Master Facility Inventory (MFI) as nursing care homes, personal care homes with nursing, personal care homes, and domiciliary homes. Also included are nursing homes that opened for business between the time the 1973 MFI was conducted and December 1976. A nursing home must have three beds or more and may be either freestanding or a distinct unit of a larger facility.

Terms relating to discharges

Discharge.—A discharge is a person who was formally discharged from a nursing home during 1976. Both live and dead discharges are included. Theoretically, the same person can be counted more than once if he was discharged more than once from a nursing home during 1976.

Age.—The age of a discharge is his age at the time of discharge.

Discharge status.—The discharge status is whether the person was discharged from the nursing home alive or dead.

Length of stay.—The length of stay is the period of time between the date of admission and the date of discharge.

Living arrangement after discharge for live discharge.—The living arrangement after discharge refers to the residence where the person lives after being discharged.

Another nursing home.—Another nursing home includes domiciliary or personal care facilities, intermediate care facilities, and skilled nursing facilities.

Other health facility.—Other health facility includes chronic disease, rehabilitation, geriatric and other long-term care hospitals, and facilities for the mentally retarded.

Private or semiprivate residence.—Private or semiprivate residence includes houses or apartments, rented rooms, boarding houses, and retirement homes.

Marital status at time of discharge.—Marital status is the marital situation of the discharge at the time of his release from the nursing home.

Health Services

Level of care received.—These levels of care are defined by the nursing services actually received by the discharge during the 7 days prior to the discharge date. Based on the services listed in item 11 and responses to item 10b of the Discharged Resident Questionnaire, the following classifications were made. Each succeeding level is exclusive of the previous levels:

Intensive nursing care.—Intensive nursing care includes receiving at least one of the following services:

Bowel/bladder retraining
Catheterization
Full bed bath
Intravenous injections
Oxygen therapy

Note that tube or intravenous feeding, included in the comparable definition for residents, is not included in this definition.

Other nursing care.—Other nursing care includes receiving at least one of the following services:

Application of sterile dressings or bandages
Blood pressure reading
Enema
Hypodermic injections
Irrigation
Temperature, pulse, or respiration check

Personal care or none.—Personal care includes receiving at least one of the following services:

Medication prescribed at last physician visit
Rub or massage
Special diet

None includes those discharges who received none of the preceding services.

Note that the medication service in this definition is not identical to that for residents (administration of treatment or medications). Furthermore, help with bathing, dressing, or eating (included in the comparable definition for residents) is not included in this definition.

Therapy service.—Therapy service refers to whether the discharge received any therapy services provided by a licensed, registered, or professionally trained therapist during the calendar month prior to the discharge. These services may have been provided either inside or outside the facility.

Time since last physician visit.—This is the length of time between the date of discharge and the last time the person saw a physician (M.D. or D.O.) while still a resident of the facility for treatment, medication, or examination.

Health Status

Activities of daily living.—The activities of daily living were collected for discharges in the areas of continence and mobility only, based on information on the medical record concerning performance at the time of discharge.

Continence

No difficulty controlling bowels or bladder.—The discharge did not have any difficulty in controlling either his bowels or bladder at the time of discharge.

Difficulty controlling bowels.—The discharge had difficulty controlling his bowels at the time of discharge.

Difficulty controlling bladder.—The discharge had difficulty controlling his bladder at the time of discharge.

Ostomy in either bowels or bladder.—The discharge had undergone a surgical procedure that resulted in the creation of an artificial opening for the elimination of waste.

Mobility

Walks with or without assistance.—The discharge was able to walk at the time of discharge, either with or without assistance of special equipment or another person. This category excludes those discharges who were chairfast, bedfast, or whose status was unknown.

Chairfast.—The discharge was confined to a chair when discharged.

Bedfast.—The discharge was confined to a bed when discharged.

Primary diagnosis at admission.—The primary diagnosis at admission was the one condition reported by the nursing staff respondent as the major diagnosis noted at the time of admission. The list of conditions corresponds to the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States* (ICDA),[15] The respondent reported the information based on the discharge's medical record.

Chronic conditions and impairments.—Chronic conditions and impairments include those long-term physical and mental problems of the discharge selected by the nursing staff respondent from a list of 37 conditions and impairments (see item 8 of the Discharged Resident Questionnaire). The respondent based the selection on a check of the medical record. More than one condition or impairment could be reported.

Special aids or devices used.—This category includes only those special aids or devices used on a regular basis (see list in item 13 of the Discharged Resident Questionnaire). Definitions for selected special aids and devices are presented:

Cuffs.—Cuffs are hand or foot devices consisting of a fabric cuff that is placed around the waist or ankle, with a second strap attaching the cuff to a side rail or belt. It is used to protect the resident from injuring himself.

Geriatric chair.—A geriatric chair is a padded chair or a combination chair and table with small wheels and with a high back. It is designed to support the resident.

Mechanical feeding device.—A mechanical feeding device is any adaptive equipment that helps the resident to feed himself.

Posey belt or similar device.—A posey belt or similar device is an apparatus that may be used either in a bed or a wheelchair to secure chest, waist, or legs.

Walker.—A walker is a device that the resident uses on his own to support himself while walking.

Other.—Other special aids or devices include slings, artificial limbs, orthopedic shoes, shower chairs, page turners, and devices other than those listed in the tables.

NOTE: A list of references follows the text.

Appendix IV. Questionnaires used in the National Ambulatory Medical Care Survey, the National Hospital Discharge Survey, and the National Nursing Home Survey

Patient Record and Patient Log

ASSURANCE OF CONFIDENTIALITY - All information which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey and will not be disclosed or released to other persons or used for any other purpose.

PATIENT LOG

As each patient arrives, record name and time of visit on the log below. For the patient on line 1, also complete the patient record to the right.

PATIENT'S NAME	TIME OF VISIT
1	a.m. / p.m.
2	a.m. / p.m.
3	a.m. / p.m.
4	a.m. / p.m.
5	a.m. / p.m.

Record items 1-14 for this patient

CONTINUE LISTING PATIENTS ON NEXT PAGE

PATIENT RECORD
NATIONAL AMBULATORY MEDICAL CARE SURVEY

1. DATE OF VISIT — Mo / Day / Yr

2. DATE OF BIRTH — Mo / Day / Yr

3. SEX
- ☐ FEMALE
- ☐ MALE

4. COLOR OR RACE
- ☐ WHITE
- ☐ NEGRO/BLACK
- ☐ OTHER
- ☐ UNKNOWN

5. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN?
- ☐ YES
- ☐ NO

6. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT *(In patient's own words)*
- a. MOST IMPORTANT _____
- b. OTHER _____

7. TIME SINCE ONSET OF COMPLAINT/SYMPTOM IN ITEM 6a *(Check one)*
- ☐ LESS THAN 1 DAY
- ☐ 1-6 DAYS
- ☐ 1-3 WEEKS
- ☐ 1-3 MONTHS
- ☐ MORE THAN 3 MONTHS
- ☐ NOT APPLICABLE

8. PHYSICIAN'S DIAGNOSES
- a. PRINCIPAL DIAGNOSIS/PROBLEM ASSOCIATED WITH ITEM 6a _____
- b. OTHER SIGNIFICANT CURRENT DIAGNOSES _____

9. HAVE YOU SEEN PATIENT BEFORE?
- ☐ YES
- ☐ NO

IF YES, FOR THE CONDITION IN ITEM 6a?
- ☐ YES
- ☐ NO

10. SERIOUSNESS OF CONDITION IN ITEM 6a *(Check one)*
- ☐ VERY SERIOUS
- ☐ SERIOUS
- ☐ SLIGHTLY SERIOUS
- ☐ NOT SERIOUS

11. DIAGNOSTIC SERVICES THIS VISIT *(Check all ordered or provided)*
- ☐ NONE
- ☐ LIMITED EXAM/HISTORY
- ☐ GENERAL EXAM/HISTORY
- ☐ PAP TEST
- ☐ CLINICAL LAB TEST
- ☐ X-RAY
- ☐ EKG
- ☐ VISION TEST
- ☐ ENDOSCOPY
- ☐ BLOOD PRESSURE CHECK
- ☐ OTHER *(Specify)* _____

12. THERAPEUTIC SERVICES THIS VISIT *(Check all ordered or provided)*
- ☐ NONE
- ☐ IMMUNIZATION/DESENSITIZATION
- ☐ DRUGS (PRESCRIPTION/NONPRESCRIPTION)
- ☐ DIET COUNSELING
- ☐ FAMILY PLANNING
- ☐ MEDICAL COUNSELING
- ☐ PHYSIOTHERAPY
- ☐ OFFICE SURGERY
- ☐ PSYCHOTHERAPY/THERAPEUTIC LISTENING
- ☐ OTHER *(Specify)* _____

13. DISPOSITION THIS VISIT *(Check all that apply)*
- ☐ NO FOLLOW-UP PLANNED
- ☐ RETURN AT SPECIFIED TIME
- ☐ RETURN IF NEEDED, P.R.N.
- ☐ TELEPHONE FOLLOW-UP PLANNED
- ☐ REFERRED TO OTHER PHYSICIAN
- ☐ RETURNED TO REFERRING PHYSICIAN
- ☐ ADMIT TO HOSPITAL
- ☐ OTHER *(Specify)* _____

14. DURATION OF THIS VISIT *(Time actually spent with physician)*

_____ MINUTES

HRA-34-3
REV. 9-75

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
PUBLIC HEALTH SERVICE
HEALTH RESOURCES ADMINISTRATION
NATIONAL CENTER FOR HEALTH STATISTICS

O.M.B. 068-R1498

Form Approved: O.M.B. No. 68-R0620

CONFIDENTIAL – All information which would permit identification of an individual or of an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to other persons or used for any other purpose.

FORM HDS-1
(12-15-76)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
HEALTH RESOURCES ADMINISTRATION
NATIONAL CENTER FOR HEALTH STATISTICS

MEDICAL ABSTRACT – HOSPITAL DISCHARGE SURVEY

A. PATIENT IDENTIFICATION

1. Hospital number . . . . . ☐☐☐☐
2. HDS number . . . . . ☐☐☐☐
3. Medical Record number _____
4. Date of admission . . . Month ☐☐ – Day ☐☐ – Year ☐☐
5. Date of discharge . . . Month ☐☐ – Day ☐☐ – Year ☐☐
6. Residence ZIP Code ☐☐☐☐☐

B. PATIENT CHARACTERISTICS

7. Date of birth . . . Month ☐☐ – Day ☐☐ – Year ☐☐
8. Age *(Complete only if Date of Birth not given)* . . . . Units ☐☐ 1 ☐ Years 2 ☐ Months 3 ☐ Days
9. Sex *(Mark one)* 1 ☐ Male 2 ☐ Female 3 ☐ Not stated
10. Race or Color *(Mark one)* 1 ☐ White 2 ☐ Black 3 ☐ Other 4 ☐ Not stated
11. Marital Status *(Mark one)* 1 ☐ Married 2 ☐ Single 3 ☐ Widowed 4 ☐ Divorced 5 ☐ Separated 6 ☐ Not stated

12. Expected Source(s) of payment

Principal *(Mark one)*	Other *(Mark all that apply)*
1 ☐	☐ Self-pay
2 ☐	☐ Workmen's Compensation
3 ☐	☐ Medicare
4 ☐	☐ Medicaid
5 ☐	☐ Other government payments
6 ☐	☐ Blue Cross
7 ☐	☐ Other private or commercial insurance
8 ☐	☐ No charge
9 ☐	☐ Other *(Specify)* _____
10 ☐	☐ Not stated

13. Disposition of Patient *(Mark one)*

1 ☐ Routine discharge/discharged home
2 ☐ Left against medical advice
3 ☐ Discharged/transferred to another facility or organization
4 ☐ Discharged/referred to organized home care service
5 ☐ Died
6 ☐ Not stated

C. DIAGNOSES

Principal: _____
Other/additional: _____
_____
_____
☐ See reverse side

D. SURGICAL AND DIAGNOSTIC PROCEDURES

Date: Month Day Year

Principal: _____ ☐☐ – ☐☐ – ☐☐
Other/additional: _____ ☐☐ – ☐☐ – ☐☐
_____ ☐☐ – ☐☐ – ☐☐
_____ ☐☐ – ☐☐ – ☐☐
_____ ☐☐ – ☐☐ – ☐☐

☐ NONE ☐ See reverse side

Completed by | Date

☆U.S. GOVERNMENT PRINTING OFFICE: 1976-788-230

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
Health Resources Administration
National Center for Health Statistics
1977 National Nursing Home Survey

DISCHARGED RESIDENT QUESTIONNAIRE

OMB # 68-575025
APPROVAL EXPIRES 12-31-77

Control No. ☐☐☐☐

Confidential Information

Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with Section 308(d) of the Public Health Service Act (42 USC 242m).

A. Resident Line No.	B. Date of Interview	C. Date of Discharge
☐☐☐☐	☐☐ Mo. ☐☐ Day ☐☐ Year	☐☐ Mo. ☐☐ Day ☐☐ Year
D. Interviewer Name _____		E. Start Time _____ 1 ☐ am 2 ☐ pm

1. WHAT WAS THE DATE OF ADMISSION PRIOR TO THE DISCHARGE DATE OF *(Date of Discharge)*?

☐☐ Mo. ☐☐ Day ☐☐ Year

2. WHAT WAS THE SEX OF THIS RESIDENT?

1 ☐ Male 2 ☐ Female

3. WHAT WAS——DATE OF BIRTH?

☐☐ Mo. ☐☐ Day 1☐☐ Year or ☐☐ Age

4. WHAT WAS——MARITAL STATUS AT DISCHARGE?

1 ☐ Married 2 ☐ Widowed 3 ☐ Divorced 4 ☐ Separated 5 ☐ Never Married 9 ☐ Don't know

5. WAS——DISCHARGED ALIVE?

1 ☐ Yes

2 ☐ No *(Skip to instruction above Q.7)*

9 ☐ Don't know *(Skip to instruction above Q.7)*

6a. **WHERE DID——STAY IMMEDIATELY AFTER DISCHARGE FROM THIS FACILITY?**

1 ☐ Private residence (house or apartment) *(Skip to instruction above Q.7)*
2 ☐ Rented room, boarding house *(Skip to instruction above Q.7)*
3 ☐ Retirement home *(Skip to instruction above Q.7)*
4 ☐ Another health care facility
5 ☐ Other arrangements, Specify _____ *(Skip to instruction above Q.7)*
9 ☐ Don't know *(Skip to instruction above Q.7)*

b. *Show Flashcard #1* **WHAT TYPE OF FACILITY WAS IT?**

1 ☐ Domiciliary or personal care facility
2 ☐ Intermediate Care Facility (ICF)
3 ☐ Skilled Nursing Facility (SNF)
4 ☐ Facility for mentally retarded
5 ☐ General or short term hospital
6 ☐ Mental hospital
7 ☐ Chronic disease, rehabilitation, geriatric or other long-term care hospital
8 ☐ Other, Specify _____ *(Skip to instruction above Q.7)*
9 ☐ Don't know *(Skip to instruction above. Q.7)*

c. **DID——DIE IN THIS OTHER HEALTH CARE FACILITY?**

1 ☐ Yes 2 ☐ No 9 ☐ Don't know

Interviewer, Read: **"SINCE THIS RESIDENT HAS BEEN DISCHARGED, THE REMAINING QUESTIONS REFER TO HEALTH STATUS AT THE TIME OF DISCHARGE, THAT IS, ON** *(Date of Discharge in item C)."*

INTERVIEWER NOTE: If the resident was in the home less than twelve months prior to discharge, mark this box ☐ *and skip to Q.8. Otherwise, continue with Q.7a.*

7a. **DID——RECEIVE A FLU SHOT WITHIN THE TWELVE MONTHS PRIOR TO** *(Date of Discharge)?*

1 ☐ Yes 2 ☐ No *(Skip to Q.7c)* 9 ☐ Don't Know - No Record *(Skip to Q.7c.)*

b. **WHEN DID——RECEIVE THE FLU SHOT?**

␣␣ ␣␣ ☐ Don't know
mo. yr.

c. **DID——CATCH THE FLU DURING THE NINE MONTHS PRIOR TO** *(Date of Discharge)?*

1 ☐ Yes 2 ☐ No *(Skip to Q.8)* 9 ☐ Don't Know - No Record *(Skip to Q.8.)*

d. **WHEN DID——CATCH THE FLU?**

␣␣ ␣␣ ☐ Don't know
mo. yr.

8. *Show Flashcard #2* DID———HAVE ANY OF THE FOLLOWING CONDITIONS OR IMPAIRMENTS? *(Mark (X) all that apply)*

☐ None of these conditions

A. Mental Conditions/Impairments

☐ (1) Senility
☐ (2) Mental Retardation
☐ (3) Mental Illness
☐ (4) Chronic Brain Syndrome

INTERVIEWER NOTE: If the respondent reports that the resident was both mentally retarded and mentally ill, mark this box ☐ *and read:* HAVE I RECORDED CORRECTLY THAT——— WAS MENTALLY ILL AND MENTALLY RETARDED? *If necessary, correct.*

B. Physical Conditions/Impairments

☐ (5) Hardening of the Arteries
☐ (6) Stroke
☐ (7) Hypertension
☐ (8) Heart Trouble
☐ (9) Edema (Fluid Retention)
☐ (10) Arthritis/Rheumatism
☐ (11) Paralysis or Palsy other than arthritis - stroke related
☐ (12) Paralysis or Palsy other than arthritis - unrelated to stroke
☐ (13) Parkinson's Disease
☐ (14) Kidney Trouble/Chronic Urinary Tract Infections
☐ (15) Constipation
☐ (16) Insomnia
☐ (17) Diabetes
☐ (18) Cancer
☐ (19) Deafness
☐ (20) Blindness
☐ (21) Glaucoma
☐ (22) Cataracts
☐ (23) Chronic Respiratory Disease
☐ (24) Anemia
☐ (25) Bedsores
☐ (26) Hip Fractures
☐ (27) Other Fractures
☐ (28) Alcoholism
☐ (29) Drug Addiction
☐ (30) Chronic Back/Spine Problems (excluding Stiffness and Deformity)

Permanent Stiffness or Deformity of:

☐ (31) back
☐ (32) arms
☐ (33) legs
☐ (34) extremities (feet, toes, hands or fingers)

Missing Limbs or Extremities:

☐ (35) arms
☐ (36) legs
☐ (37) extremities (feet, toes, hands or fingers)

☐ Don't know

8. Show Flashcard #3 **ACCORDING TO——MEDICAL RECORD, WHAT WAS THE PRIMARY DIAGNOSIS AT THE TIME OF ADMISSION, THAT IS, ON** *(Date of Admission in Q.1)?*

A. Heart and Other Circulatory Problems

01 ☐ Congestive Heart Failure (C.H.F.)
02 ☐ Hardening of the Arteries (Arteriosclerosis, A.S.H.D.)
03 ☐ Heart Attack, Ischemic Heart Disease (Acute Myocardial Infarction-M.I.)
04 ☐ High Blood Pressure (Hypertension)
05 ☐ Phlebitis
06 ☐ Pulmonary Embolism
07 ☐ Rheumatic Heart Disease
08 ☐ Stroke (Cerebrovascular Disease-C.V.A.)
09 ☐ Other Circulatory Problems, Specify_____

B. Mental Disorders

10 ☐ Chronic Brain Syndrome
11 ☐ Mental Retardation
12 ☐ Neurosis
13 ☐ Psychosis (Schizophrenia, Paranoia, Manic Depression, etc.)
14 ☐ Senile Psychosis (Senile Dementia)
15 ☐ Senile, Not Psychotic
16 ☐ Other Mental Disorders, Specify _____

C. Other Diagnoses

17 ☐ Alcoholism
18 ☐ Anemia
19 ☐ Arthritis/Rheumatism
20 ☐ Asthma
21 ☐ Blindness
22 ☐ Bone Fracture, other than Hip
23 ☐ Bronchitis
24 ☐ Cancer (Malignant Neoplasm)
25 ☐ Cataracts
26 ☐ Cirrhosis of the Liver
27 ☐ Deafness
28 ☐ Diabetes
29 ☐ Drug Addiction
30 ☐ Emphysema
31 ☐ Epilepsy
32 ☐ Glaucoma
33 ☐ Gout
34 ☐ Hip Fracture
35 ☐ Multiple Sclerosis
36 ☐ Parkinson's Disease
37 ☐ Pneumonia
38 ☐ Polio
39 ☐ Respiratory, other than Pneumonia
40 ☐ Syphilis
41 ☐ Ulcers
42 ☐ Other, Specify _____
99 ☐ Don't know

10a. DURING THIS PARTICULAR STAY, WHEN DID——LAST SEE A PHYSICIAN FOR TREATMENT, MEDICATION, OR FOR AN EXAMINATION?

☐☐ Mo. ☐☐ Day ☐☐ Year or ☐ Never saw a doctor during this stay *(Skip to Q.11)* ☐ Don't know *(Skip to Q.11)*

b. AT THAT TIME DID——RECEIVE:

	Yes	No	Don't Know
(1) AN EXAMINATION?	1 ☐	2 ☐	9 ☐
(2) A PRESCRIPTION (INCLUDING REFILLS)?	1 ☐	2 ☐	9 ☐
(3) TREATMENT?	1 ☐	2 ☐	9 ☐
(4) ORDERS FOR LABORATORY TESTS?	1 ☐	2 ☐	9 ☐
(5) ANY OTHER SERVICES?	1 ☐	2 ☐	9 ☐

Specify _____

11. *Show Flashcard #4* **DURING THE LAST 7 DAYS BEFORE DISCHARGE, THAT IS, FROM** *(Date 7 days prior to discharge date)* **TO** *(Date of Discharge)*, **WHICH OF THESE SERVICES DID——RECEIVE?** *(Mark (X) all that apply)*

- ☐ a. Blood pressure reading
- ☐ b. Temperature-pulse-respiration
- ☐ c. Application of sterile dressings or bandages
- ☐ d. Full bed-bath
- ☐ e. Rub or massage
- ☐ f. Enema
- ☐ g. Catheterization
- ☐ h. Bowel retraining
- ☐ i. Bladder retraining
- ☐ j. Irrigation
- ☐ k. Oxygen therapy
- ☐ l. Intravenous injection
- ☐ m. Hypodermic injection
- ☐ n. Administration of other medical treatment by staff
- ☐ o. Special diet

(1) WHAT TYPE OF DIET WAS IT? *(Mark (X) all that apply)*

☐ a. diabetic ☐ b. low sodium ☐ c. bland ☐ d. soft ☐ e. low cholesterol

☐ f. weight loss ☐ g. weight gain ☐ h. Other, Specify _____

☐ None of the above services received

☐ Don't know

12a. **DURING** *(Last calendar month before discharge)* **OF 1976, DID——RECEIVE ANY THERAPY SERVICES EITHER INSIDE OR OUTSIDE OF THIS FACILITY FROM A LICENSED, REGISTERED, OR PROFESSIONALLY TRAINED THERAPIST?**

1 ☐ Yes 2 ☐ No *(Skip to Q.13)* 9 ☐ Don't know *(Skip to Q.13)*

b. *Show Flashcard #5* **WHICH TYPES OF THERAPY DID——RECEIVE DURING THAT MONTH?** *(Mark (X) all that apply)*

(1) Physical therapy ☐

(2) Occupational therapy ☐

(3) Recreational therapy ☐

(4) Speech and hearing therapy ☐

(5) Counseling/therapy by a psychiatrist, psychologist, or other mental health worker ☐

(6) Counseling by social worker ☐

(7) Reality orientation ☐

(8) Other therapy services, Specify _____ ☐

13. *Show Flashcard #6* **DID——REGULARLY USE ANY OF THESE AIDS?** *(Mark (X) all that apply)*

☐ a. Eye glasses

☐ b. Hearing aid

☐ c. Wheelchair

☐ d. Cane

☐ e. Walker

☐ f. Crutches

☐ g. Braces

☐ h. Slings

☐ i. Artificial limb

☐ j. Mechanical feeding device

☐ k. Orthopedic shoe

☐ l. Geriatric chair

☐ m. Posey belt or similar devices

☐ n. Cuffs

☐ o. Other aids or devices, Specify _____

☐ No aids used

☐ Don't know

14a. **WAS——BEDFAST?**

1 ☐ Yes *(Skip to Q.15)* 2 ☐ No 9 ☐ Don't know

b. **WAS——CHAIRFAST?**

1 ☐ Yes 2 ☐ No 9 ☐ Don't know

15. **DID——HAVE ANY DIFFICULTY IN CONTROLLING——BOWELS?**

1 ☐ Yes
2 ☐ No
3 ☐ Not applicable, had an ostomy
9 ☐ Don't know

16. **DID——HAVE ANY DIFFICULTY IN CONTROLLING——BLADDER?**

1 ☐ Yes
2 ☐ No
3 ☐ Not applicable, had ostomy, indwelling catheter, or external device
9 ☐ Don't know

Interviewer, Read: **THE REMAINING QUESTIONS DEAL WITH CHARGES AND PAYMENT SOURCES. DO YOU HAVE THIS INFORMATION?**

1 ☐ Yes *(Go to note above Q.17)*
2 ☐ No *(Determine who has information and when you have completed all the Discharged Resident Questionnaires, interview that person for the information using Prompt Card #11.)*

F. End Time _____ 1 ☐ am 2 ☐ pm

G. Time elapsed ⌊_⌊_⌋ Minutes

H. Start Time _____ 1 ☐ am 2 ☐ pm

INTERVIEWER NOTE: Before proceeding, refer to the admission date in Q.1. If resident was admitted after the first day of the calendar month preceding the date of discharge, mark this box ☐ *and skip to Q.18. Otherwise, continue with Q.17.*

17. **FOR THE MONTH OF** *(last calendar month before discharge)*, **WHAT WAS THE TOTAL CHARGE BILLED FOR——CARE, INCLUDING ALL CHARGES FOR PRIVATE DUTY NURSING, DRUGS, AND SPECIAL MEDICAL SUPPLIES?**

$ ⌊_⌊_⌊_⌋ .00 per

2 ☐ Day
3 ☐ Week
4 ☐ Month
5 ☐ Other period, Specify _____

☐ No charge made for care, Explain:

1 ☐ Facility assumed cost
2 ☐ Initial payment/life care arrangement
3 ☐ Other, Specify _____

☐ Don't know (Not billed yet, etc.)

Skip to Q.19

18. FROM *(Date of Admission)* THROUGH *(Date of Discharge)*, WHAT WAS THE TOTAL CHARGE BILLED FOR——CARE, INCLUDING ALL CHARGES FOR PRIVATE DUTY NURSING, DRUGS, AND SPECIAL MEDICAL SUPPLIES?

$ ☐☐☐☐ .00 per

1 ☐ Entire reporting period
2 ☐ Day
3 ☐ Week
4 ☐ Month
5 ☐ Other period, Specify _____

☐ No charge made for care, explain:

1 ☐ Facility assumed cost
2 ☐ Initial payment/life care arrangement
3 ☐ Other, Specify _____

☐ Don't know (Not billed yet, etc.)

19. *Show Flashcard #7* WHAT WERE ALL THE SOURCES OF PAYMENT FOR——CARE DURING THIS TIME? *(Mark (X) all that apply)*

☐ a. Own income, family support, health insurance, retirement funds, social security, etc.
☐ b. Medicare
☐ c. Medicaid-skilled nursing
☐ d. Medicaid-intermediate care
☐ e. Other government assistance or welfare
☐ f. Religious organizations, foundations, volunteer agencies
☐ g. VA contract
☐ h. Initial payment-life care funds
☐ i. No charge made for care (Facility assumed cost)
☐ j. Payment source not determined *(Skip to note below Q.21)*
☐ k. Other, Specify _____
☐ Don't know

20. *Show Flashcard #7* WHAT WAS THE PRIMARY SOURCE OF PAYMENT FOR——CARE DURING THIS TIME?

01 ☐ a. Own income, family support, health insurance, retirement funds, social security, etc.
02 ☐ b. Medicare
03 ☐ c. Medicaid-skilled nursing
04 ☐ d. Medicaid-intermediate care
05 ☐ e. Other government assistance or welfare
06 ☐ f. Religious organizations, foundations, volunteer agencies
07 ☐ g. VA contract
08 ☐ h. Initial payment-life care funds
09 ☐ i. No charge made for care (Facility assumed cost)
10 ☐ j. Payment source not determined *(Skip to note below Q.21)*
11 ☐ k. Other, Specify _____
12 ☐ Don't know

21. WHAT WAS THE AMOUNT PAID BY THE PRIMARY SOURCE OF PAYMENT DURING THIS TIME?

$ ☐☐☐☐ .00 ☐ Don't know

INTERVIEWER NOTE: Be sure to fill in the items below and continue to next Discharged Resident Questionnaire.

I. End Time _____ 1 ☐ am 2 ☐ pm	J. Time Elapsed ☐☐☐ Minutes

☆ U.S. GOVERNMENT PRINTING OFFICE: 1977—724-473/668 3-1

Vital and Health Statistics series descriptions

SERIES 1. **Programs and Collection Procedures.**—Reports describing the general programs of the National Center for Health Statistics and its offices and divisions and the data collection methods used. They also include definitions and other material necessary for understanding the data.

SERIES 2. **Data Evaluation and Methods Research.**—Studies of new statistical methodology including experimental tests of new survey methods, studies of vital statistics collection methods, new analytical techniques, objective evaluations of reliability of collected data, and contributions to statistical theory.

SERIES 3. **Analytical and Epidemiological Studies.**—Reports presenting analytical or interpretive studies based on vital and health statistics, carrying the analysis further than the expository types of reports in the other series.

SERIES 4. **Documents and Committee Reports.**—Final reports of major committees concerned with vital and health statistics and documents such as recommended model vital registration laws and revised birth and death certificates.

SERIES 10. **Data From the National Health Interview Survey.**—Statistics on illness, accidental injuries, disability, use of hospital, medical, dental, and other services, and other health-related topics, all based on data collected in the continuing national household interview survey.

SERIES 11. **Data From the National Health Examination Survey and the National Health and Nutrition Examination Survey.**—Data from direct examination, testing, and measurement of national samples of the civilian noninstitutionalized population provide the basis for (1) estimates of the medically defined prevalence of specific diseases in the United States and the distributions of the population with respect to physical, physiological, and psychological characteristics and (2) analysis of relationships among the various measurements without reference to an explicit finite universe of persons.

SERIES 12. **Data From the Institutionalized Population Surveys.**—Discontinued in 1975. Reports from these surveys are included in Series 13.

SERIES 13. **Data on Health Resources Utilization.**—Statistics on the utilization of health manpower and facilities providing long-term care, ambulatory care, hospital care, and family planning services.

SERIES 14. **Data on Health Resources: Manpower and Facilities.**—Statistics on the numbers, geographic distribution, and characteristics of health resources including physicians, dentists, nurses, other health occupations, hospitals, nursing homes, and outpatient facilities.

SERIES 15. **Data From Special Surveys.**—Statistics on health and health-related topics collected in special surveys that are not a part of the continuing data systems of the National Center for Health Statistics.

SERIES 20. **Data on Mortality.**—Various statistics on mortality other than as included in regular annual or monthly reports. Special analyses by cause of death, age, and other demographic variables; geographic and time series analyses; and statistics on characteristics of deaths not available from the vital records based on sample surveys of those records.

SERIES 21. **Data on Natality, Marriage, and Divorce.**—Various statistics on natality, marriage, and divorce other than as included in regular annual or monthly reports. Special analyses by demographic variables; geographic and time series analyses; studies of fertility; and statistics on characteristics of births not available from the vital records based on sample surveys of those records.

SERIES 22. **Data From the National Mortality and Natality Surveys.**—Discontinued in 1975. Reports from these sample surveys based on vital records are included in Series 20 and 21, respectively.

SERIES 23. **Data From the National Survey of Family Growth.**—Statistics on fertility, family formation and dissolution, family planning, and related maternal and infant health topics derived from a periodic survey of a nationwide probability sample of ever-married women 15-44 years of age.

For a list of titles of reports published in these series, write to:

Scientific and Technical Information Branch
National Center for Health Statistics
Public Health Service
Hyattsville, Md. 20782